LOCAL AGENCY FORMATION COMMISSION
COUNTY OF SAN BERNARDINO

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DATE: MARCH 7, 2005

FROM: KATHLEEN ROLLINGS-McDONALD, Executive Officer

TO: LOCAL AGENCY FORMATION COMMISSION

SUBJECT: AGENDA ITEM #6 – LAFCO 2919 – Service Review and Sphere of Influence Update for the San Bernardino Valley Water Conservation District

INITIATED BY:

Local Agency Formation Commission for San Bernardino County

RECOMMENDATION:

Staff's recommendation is that the Commission continue consideration of LAFCO 2919 to the May 18, 2005 hearing with the direction to staff to review questions with San Bernardino Valley Water Conservation District staff to provide additional information on:

1. District expenditures for the past two fiscal years and the current fiscal year related to costs associated with the Water Rights Application, expenditures for Board of Directors, spreading of water, etc.

2. District revenues generated for the past two fiscal years and the current fiscal year related to receipts from mining interests and groundwater spreading charge.

3. The statutory provisions related to potential consolidation of districts formed under different principal acts including, but not limited to, the transfer of groundwater charges, succession to mining leases between the District and mining interests.

4. If consolidation is not considered, would the appropriate sphere of influence designation for this District be the limits of the Bunker Hill Basin rather than merely a portion of its eastern area.

However, if the Commission feels that adequate information has been provided by the District for the affirmation of its existing sphere of influence and that the questions surrounding the distinction of the Bunker Hill Basin are answered, it may take the following actions to close this consideration:

1. Determine that the affirmation of the District's existing sphere of influence through LAFCO 2919 is statutorily exempt from environmental review and direct the Clerk to file a Notice of Exemption within five days;

2. Make the findings related to a service review required by Government Code Section 56430 and determine that the sphere of influence for the San Bernardino Valley Water Conservation District should be affirmed in its present configuration; and,

3. Defer adoption of the resolution making these determinations to the consent calendar for the April 20, 2005 Commission hearing.

BACKGROUND INFORMATION:

This proposal was initiated by the Local Agency Formation Commission on January 15, 2003, in response to State mandates requiring service reviews and sphere of influence updates for all cities and special districts on a rotating five-year schedule. This is the final agency to be discussed within the East Valley agency reviews. Included in this report are the following attachments:

#1 -- maps which identify the boundaries and sphere of influence for San Bernardino Valley Water Conservation District (hereafter SBVWCD) along with overlay maps showing the relationship of the District to the Cities and Water Districts within its jurisdiction.

#2 -- outline of the purposes and structure of a Water Conservation District.

#3 -- staff report for LAFCO 2751, consideration of an annexation to the San Bernardino Valley Water Conservation District.

#4 -- District Summary Profile Sheet and the response provided by the District to the LAFCO survey of the factors required by Government Code Section 56430 for a service review.

WATER CONSERVATION DISTRICTS:

Attachment #2 to this report includes a general outline of a Water Conservation District and the services it can perform under its principal act, prepared by LAFCO staff. As noted, Water Conservation District Law has been in existence since 1931 as a means to address locally the conservation of water and water rights within an area which is defined as the "watershed providing the water supply to its inhabitants". The services that can be offered by a Water Conservation District include:

1. Appropriate, acquire and conserve water and water rights for any useful purpose;

2. Make surveys and investigations of the water supply and resources of the district;

3. Acquire and construct dams, reservoirs, canals, conduits, spreading basins and sinking basins in order to conserve, store, spread and sink water;

4. Provide for the construction, operation, and maintenance of such works, facilities and operations within or outside the district's boundaries to protect the land or property in the district from damage by flood or overflow;

5. Drill, construct, install and operate wells, pumps, pipelines, conduits, valves, etc. and may pump water from these facilities for sale, delivery, distribution or other disposition;

6. Sell, deliver, distribute or otherwise dispose of any water that may be stored or appropriated, owned or controlled by the district;

7. Acquire, construct, maintain, and operate recreational facilities in connection with any dams, reservoirs or other works owned or controlled by the District.

As this outline notes, the functions and purposes of these types of districts are limited to the preservation of the water supply within a given area. In San Bernardino County there are two water conservation districts, both serving within the Valley portion of the County (their service areas are outlined on the vicinity maps within Attachment #1). In each case they are located and serve within managed water basins – Chino Basin Water Conservation District serving the west-

end area of the Valley associated with the Inland Empire Utilities Agency service area, and the SBVWCD serving the east-end of the Valley associated with the San Bernardino Valley Municipal Water District service area. Due to the regional nature of these agencies and their minimal annexation activity, they have had little official contact with LAFCO during the past 40 years.

In 1993, the Commission reviewed and approved an annexation proposal involving the SBVWCD expanding its boundaries by approximately 2,929 acres (LAFCO 2751). LAFCO 2751 was highly controversial due to the District's recent imposition of a groundwater charge and ultimately resulted in a modification to the boundaries to exclude the area of the District's sphere of influence within the Santa Ana River comprising 1,980 acres. This exclusion was based upon agreements reached between the District and the major water producers within the area which included the City of Riverside, the Western Municipal Water District of Riverside County, the Aqua Mansa Water Company, Meeks and Daley Water Company and the Riverside Highland Water Company. This 1,980 acre area remains the District's sphere of influence area outside its boundaries. A copy of the LAFCO staff report related to this proposal is included as Attachment #3.

SERVICE REVIEW:

The SBVWCD was formed in 1931, immediately following the implementation of Water Conservation District law as a means "to protect against excessive export of the local surface water by downstream agencies". The District operates recharge facilities in two areas – the Santa Ana River and Mill Creek. The SBVWCD is an independent special district formed under the provisions of Water Conservation District law (Water Code Sections 74000 through 76501).

In reference to the factors and findings required for a service review, the District provided a response in 2003 for Commission consideration along with numerous appendices, a copy of which is available for review in the LAFCO office. The report prepared by the SBVWCD is comprehensive in its review of the factors required by Government Code Section 56430. During the interim period, staff has met with the District on two occasions to discuss the service review/sphere update and to request updated materials due to the time delay in processing. The District has provided additional materials to assist staff in its review. The survey response contained in the District's response will not be reiterated in this report and is included as an attachment to this report along with some of the appendix documents (Attachment #4).

Appendix materials included as a part of Attachment #4 are:

1. The District's Draft "Program for Effective Recharge Coordination" or PERC dated June 2004, which defines the methods it will use in performing its functions, and a spreadsheet listing of the water spread for conservation purposes in Mill Creek and the Santa Ana river;

2. A copy of the letter received from the District in regard to the Seven Oaks Dam Borrow Site Restoration Project;

3. The Proposed Land Management and Habitat Conservation Plan for the Upper Santa Ana River Wash; and,

4. A spreadsheet outlining the amount of water spread historically in the Santa Ana River and Mill Creek by the District.

The District's materials include the identification of its mission statement as follows:

"The mission of the San Bernardino Valley Water Conservation District is to ensure recharge of the Bunker Hill Groundwater Basin in an environmentally and economically responsible way, using local native surface water to the maximum extent practicable.

We strive to improve the supply and quality of groundwater, balancing such demands with those of land, mineral and biological resources."

A summary of the major points of consideration within the response provided by SBVWCD and those areas which have prompted additional staff questions are outlined as follows:

1. Infrastructure Needs and Deficiencies:

   The District materials have indicated that most of the District's canals and percolation basins were constructed in the 1930's and remain in good condition at the present time. Their purpose has been to divert water from the Santa Ana River and Mill Creek for spreading and percolation within District facilities for recharge of the Bunker Hill Basin for better than 90 years. The materials indicated that the District plans to reconstruct its percolation basin in the "Borrow Site" for the Seven Oaks Dam which has been non-operational during that facility's construction period. The total acreage owned by the District for percolation purposes includes approximately 185 acres in the Santa Ana River area and 65.5 acres in Mill Creek.

The materials identify that the highest level of recharge during the District's history was 52,172 acre feet in the Santa Ana River in 1978 and 19,800 acre feet in 1993 in Mill Creek. The District's ability to perform its function is directly related to the amount of surface water within the Santa Ana River and Mill Creek tributary available for spreading. The District anticipates that, under the auspices of the Upper Santa Ana River Wash Land Management and Habitat Conservation Plan, additional percolation basins and ancillary facilities could be constructed for a total of 45 acres for percolation within the Santa Ana River, depending upon determinations of that study.

The District has indicated that it is one of many entities that have been working together to manage the groundwater in the Bunker Hill Basin (PERC, page 15). The District has indicated that due to the number of agencies involved in the Bunker Hill Basin and the number of uses of the water of the Santa Ana River, a coordinated, inter-agency approach is required.

According to the District's Audit Report for 2003-04, one of its unanticipated, one-time expenses relates to its Water Rights application before the State Water Resources Control Board. This application is one of a series related to changes to the Santa Ana River since the construction of the Seven Oaks Dam. The Water Conservation District, the San Bernardino Valley and Western Municipal Water Districts, and the Orange County Water District all have or had applications on file with the State Water Resources Control Board for permits to divert water from the Santa Ana River.

2. Financial Constraints and Opportunities:

The District is currently in sound financial condition with limited debt and significant reserves.

The 2004 Audit Report (included as part of Attachment #5) for the District identified a shortfall between revenues received and actual expenditures of $686,497 for the period. The report identifies that this situation was predicated upon a number of one-time expenses for the District, including costs associated with its Water Rights Application identified as $361,585 and a $414,000 purchase of State Project water which were partially offset by additional revenues. The District anticipates a full reimbursement of the costs for State Project water over time through payments of the water purveyors in the area. This report also identifies that the budgets for ensuing years will recognize the need to bring costs into balance against the

revenues received in each fiscal year.

The Audit Report identifies that the District has pooled investments of $8,257,618 with the State of California State Treasurer's Local Agency Investment Fund. However, $5,000,000 of this amount is deferred revenue received as an advance from mining interest for pre-paid mining royalties. The notes within the Audit Report indicated that this amount may be required to be repaid, however, "the District does not expect such conditions to arise and through its participation in the Wash Plan is helping to ensure this is the case".

Pursuant to the District's PERC, it maintains a policy of "pay as you go" which requires that facilities maintenance, enhancement or new construction are identified during the District's annual budget process and funding of activities through current resources or reserves identified.

Questions of staff related to the financial information presented to the Commission by the District include the following:

a. For 2003-2004 the audited actual expenditures for the District were $2,359,693. Subtracting the one-time expenses identified in the report of $686,497 leaves operating expenditures of $1,673,196 to administer and spread a total of 6,025 acre feet of water within both the Santa Ana River and Mill Creek areas in pursuit of the District's legislative charge. However, the revenues associated with Groundwater Replenishment are listed as $501,300 and include the groundwater assessments, but do not include the Mining Income from lands the District owns for future use as water conservation areas.

b. The annual costs identified in the 2003-04 budgets and the 2004-05 budgets for Director expenses are $55,000, which is approximately $7,857 per director for the year. Meeting costs in 2003-04 were estimated at $32,000. However, in 2004-05 the budget accounts were renumbered and retitled so that LAFCO staff, at the present time, can only assume that the meeting expenses would be a compilation of Account # 6063 Meeting support expense ($2,500), a portion of Conference/Seminar Registrations Account #6081 ($18,000), a portion of lodging expense Account #6078 ($22,900), and meals Account #6075 ($7,900).

c. No mention is made of an Appropriation limit for this District.

3. Cost Avoidance Opportunities and Shared Facilities Opportunities:

   Much of the District's activities outlined in its survey response have historically been projects with other agencies. The report identifies the following joint efforts by the District:

   a. Upper Santa Ana River Wash Land Management and Habitat Conservation Plan – This is a joint effort with the Cities of Highland and Redlands, the County, SBVWCD, and the U.S. Bureau of Land Management as landowners and/or agencies with responsibility within the area (information included as a part of Attachment #4). One outcome anticipated through this effort has been the designation of areas for future mining activities to be consolidated as well as defining future locations for water conservation activities. This is of special importance to the District as lands it owns are leased for sand and gravel extraction and the leases and royalties for these activities represents approximately 50% of the District's revenues as well as their identified need for restoration and/or expansion of percolation basins in the easterly portion of this project. One concern of staff regarding this effort is the lack of designation of the on-going maintenance and operation entity for the Habitat lands.

   b. Santa Ana River-Mill Creek Cooperative Water Project (the Exchange) – This is an agreement between ten public and private water agencies to allow for transfer of water among the agencies. SBVWCD has been assigned the responsibility to monitor the transfers, account for the waters exchanged, and report these matters to the other members.

   c. High Groundwater Mitigation Project – The District is participating in a program which will address the issues of the high groundwater within the reaches of the Bunker Hill Basin with the water producers and retailers in the area.

   d. Drought Mitigation Project – District purchased State Water Project waters at a discounted cost to spread within the District's boundaries to alleviate low groundwater levels brought on by the drought. The costs of this water will be charged back to the entities using the water and the District's investment refunded.

4. Government Structure Options:

   The District was originally established in 1931 by election and the assets of

its predecessor, the Water Conservation Association in the Santa Ana River, were transferred for use and operation by the District. In 1935, it acquired the assets of the East Lugonia Mutual Water Company to provide for water spreading and percolation within Mill Creek, a tributary to the Santa Ana River. Today, the District's boundaries include approximately 50,000 acres (78+ square miles) including territory within portions of the Cities of San Bernardino, Colton, Loma Linda, Highland, Redlands and Yucaipa, along with the unincorporated community of Mentone and various unincorporated areas. This area is served by a number of water retailers including the East Valley Water District, Yucaipa Valley Water District, and the Cities of San Bernardino, Loma Linda, Redlands, and Colton.

Also overlying the boundaries of the District, as outlined on maps within Attachment #1, are two other agencies authorized to provide water conservation services – the San Bernardino Valley Municipal Water District and the San Bernardino County Flood Control District:

a. The San Bernardino Valley Municipal Water District operates under Municipal Water District Law (Water Code Section 71000 through 73000) and is authorized the power to:

   "Acquire, control, distribute, store, spread, sink, treat, purify, reclaim, recapture, and salvage any water, including sewage and storm waters, for the beneficial use or uses of the District, its inhabitants or the owners of rights to water in the district…" as well as "…Acquire waterworks or a waterworks system, waters, water rights, lands, rights, and privileges; construct, maintain, and operate conduits, pipelines, reservoirs, works, machinery, and other property useful or necessary to store, convey, supply or otherwise make use of water for a waterworks plant or system for the benefit of the district…"

   In addition, this agency along with its Riverside counterpart, is the Water Master for the 1969 judgment determining the amount of water allowed for withdrawal to maintain the waterflow received by Orange County. The flows of the Santa Ana River are directly affected by the Bunker Hill Basin and the San Bernardino Valley Municipal Water District overlays the majority of this basin.

b. The San Bernardino County Flood Control District operates under provision of the Water Code Appendix 43-1 and was formed in 1939. It is authorized under Section 43-2(6) the powers of "water conservation; water rights; litigation", outlined in part as follows:

> "To store water in surface or underground reservoirs within or outside of the district for the common benefit of the district; to conserve and reclaim water for present and future use within the district…"
>
> This entity as well overlays the whole of the Bunker Hills Basin, while its flood zones divide the area of the District.

SBVWCD has indicated its opinion that a future consolidation of the District would require an election of the people, as well as its opinion that its customers, the Cities, retail water providers and entities extracting water from the basin, would not support such a consolidation. Staff's response to these positions is that the provisions of AB 2067 (Harmon), effective January 1, 2005 and not initiated at the time the response was prepared, allows for the consolidation of districts not formed under the same principal act. In such a circumstance, the election requirements would depend upon levels of protest. This is a new circumstance since the survey response has been drafted by the District. In addition, the question of consolidation has not been addressed specifically to these customer entities and a part of the staff's recommendation is intended to remedy that question through a continuance.

In addition, staff would indicate that if the SBVWCD is charged with the responsibility to recharge and assist in the maintenance of the Bunker Hill Basin, then absent a consolidation, its sphere of influence should encompass the whole of that Basin, not just the eastern end. The electorate charged with selecting the governing body should represent the whole of the Basin rather than the limited territory at its eastern extreme. This question has not been addressed by LAFCO staff with the SBVWCD, the other agencies overlaying the area with ability to provide this service, or with the customer entities of the water retailers, cities, and water producers within the area. In regard to that circumstance, staff is recommending that the Commission continue this matter to the May 18th hearing, with the direction to staff to seek the response from these agencies regarding: (a) their position on a possible consolidation with either the County Flood Control District or San Bernardino Valley Municipal Water District, and (b) what would their position be to the expansion of the District's sphere of influence to include the area identified by engineers as the "Bunker Hill Basin".

5. Local Accountability and Governance:

   The District is governed by a seven (7) member Board elected from within Divisions. The District conducts its business at regularly scheduled monthly

meetings of the Board of Directors at its administrative facilities open to the public. In addition, the District conducts monthly meetings of its three standing committees, Resources, Administration, and Outreach, composed of three members of the Board of Directors. Since the District does not provide a service, per se, to a specific customer, it has limited feedback or participation with its electorate. However, the materials provided indicate that the District does have feedback with the water purveyors or those extracting water from within its boundaries regarding its operations through its mandatory annual Engineering Assessment required for imposition of its groundwater charge, currently set at $6.05 per acre foot for non-agricultural water and $1.65 per acre foot for agricultural water, and through its participation on various committees and task forces.

The seven members of the Board of Directors are elected to four-year fixed terms and must be a registered voter within the boundaries of their respective divisions. While there is a requirement for an election in odd-numbered years, the following provides an outline of the elections actually conducted by the District during the last twenty years:

Division #1 (Redlands)	1983 and 1999
Division #5 (Mentone)	1989
Division #6 (North San Bernardino)	1993, 1997, 2001

No election has been held for Divisions 2, 3, 4, and 7 in the past twenty years according to the records of the Registrar of Voters. These divisions would have been appointed in-lieu of election with application papers filed by a single candidate.

6. When Special Districts were seated on the San Bernardino LAFCO in 1976, a listing of services and functions was prepared, as required by law, acknowledging the services actively provided by the special districts at that time. This document is identified in the Commission's Policy and Procedure Manual, Section V – Special Districts as "Exhibit A – Listing of Special Districts Functions and Services". According to this document, the SBVWCD is currently authorized the active function and service as follows:

FUNCTION	SERVICE
Water Conservation	Water Conservation

Latent powers are those powers authorized to a special district through its principal act, but which are not being actively provided. According to the SBVWCD's principal act, the Water Conservation District Law (Water Code

Sections 74000 to 76501), the latent powers of the District on the basis of the definition above would be:

FUNCTION	SERVICE
Surveys of Water Supply and Resources	Make surveys and investigations of the water supply and resources of the Water Conservation District
Flood or Overflow Control	Provide for the construction, operation, and maintenance of such works, facilities and operations within or outside the District's boundaries to protect the land or property in the District from damage by flood or overflow
Water	May sell, deliver, distribute or otherwise dispose of any water that may be stored or appropriated, owned or controlled by the District
Park and Recreation	Acquire, construct, maintain and operate recreational facilities in connection with any dams, reservoirs, or other works owned or controlled by the District

It is unclear what was intended by the definition of the function and service as "water conservation" as the definition in Water Conservation Law provides specific language in this regard. It will be staff's recommendation that the Commission update this designation to more clearly outline the function and service authorized the District. Staff would suggest, based upon the materials provided, that the District's function and services be updated as follows:

FUNCTION	SERVICE
Water Conservation	Appropriation, acquisition, and conservation of water and water rights for any useful purpose. Acquisition and construction of dams, reservoirs, canals, conduits, spreading basins and sinking basins in order to conserve, store, spread and sink water
Surveys of Water Supply and Resources	Make surveys and investigations of the water supply and resources of the Water Conservation District

In summary, the District has indicated that it performs a much-needed service, working in conjunction with the water retailers and wholesaler within the area to assure a safe and sufficient water supply. It is noted that at the time the report was prepared, none of the adjacent or overlaying agencies had identified any

concerns with the existing sphere of influence for the SBVWCD; however, their notice of this consideration has been limited. To date, no concern has been expressed from the water producers associated with the District's sphere of influence who indicated their opposition to the District's annexation twelve years ago; however, they too have had limited information regarding this consideration.

SPHERE OF INFLUENCE UPDATE:

Pursuant to the requirements of Government Code Section 56425, every sphere of influence review is required to consider four factors of consideration. Due to the regional nature of this District and the limitations of the District's boundary and sphere within the defined Bunker Hill Basin, a response to these factors is difficult to provide. However, a summary response follows based upon the existing area of the District and its sphere of influence:

1. The present and planned land uses in the area, including agricultural and open-space lands:

   The present and planned land uses in the area comprising the area of the SBVWCD represent varying levels and intensities of urban development within unincorporated County areas as well as portions of the Cities of Colton, San Bernardino, Highland, Loma Linda, Redlands, and Yucaipa. The SBVWCD comprises approximately 50,000 acres (78+ square miles) within San Bernardino County.

2. The present and probable need for public facilities and services in the area:

   The present and probable need for the services provided by the District to sustain the Bunker Hill Basin will continue and expand as the population of this portion of the Valley grows. However, the relationship of this entity's boundaries to the Bunker Hill Basin it is charged with providing water conservation and recharge efforts is of concern to LAFCO staff. The entire area of this basin is experiencing drought conditions, water contamination, and growth of the use of the groundwater supply. Water conservation is a need within the entirety of the basin, not just the eastern portion as defined by the boundaries of the SBVWCD.

3. The present capacity of public facilities and adequacy of public services that the agency to be expanded provides or is authorized to provide:

   Within its current boundaries, the District provides its services of water conservation through recharge of surface water and/or State Project water

during drought conditions in performance of its legislatively prescribed powers and responsibilities.

4. The existence of any social or economic communities of interest in the area.

   Due to the regional nature of this agency, it is difficult to address this issue. However, as noted in the materials and the mission statement of the District, its efforts are to maintain an adequate water level in the Bunker Hill Basin. The Bunker Hill Basin is much larger than the boundaries and/or sphere of influence of the District and could be considered a single community of interest. If the District's recharge efforts support this Basin, then staff would question the definition of the sphere – either it should be expanded to include the whole of this Basin, or the possibility of consolidation with a district with responsibility for this larger area should be considered.

CONCLUSION:

At this time, the primary staff recommendation is that the Commission continues this consideration to the May 18, 2005 hearing and direct staff to compile responses to the questions regarding the District's expenditures, revenues, agency positions on consolidations and agency positions on the possibility of expanding the District's sphere of influence to include the whole of the Bunker Hill Basin. As outlined in the staff report, this is based on a number of questions that the materials have raised but staff has not has sufficient to time to address.

However, if the Commission believes that sufficient information has been provided by the District, it can take the actions to approve the service review/sphere of influence update for the District affirming its existing sphere of influence designation and direct staff to return at the April 20, 2005 hearing with the resolution of approval for adoption on the consent calendar.

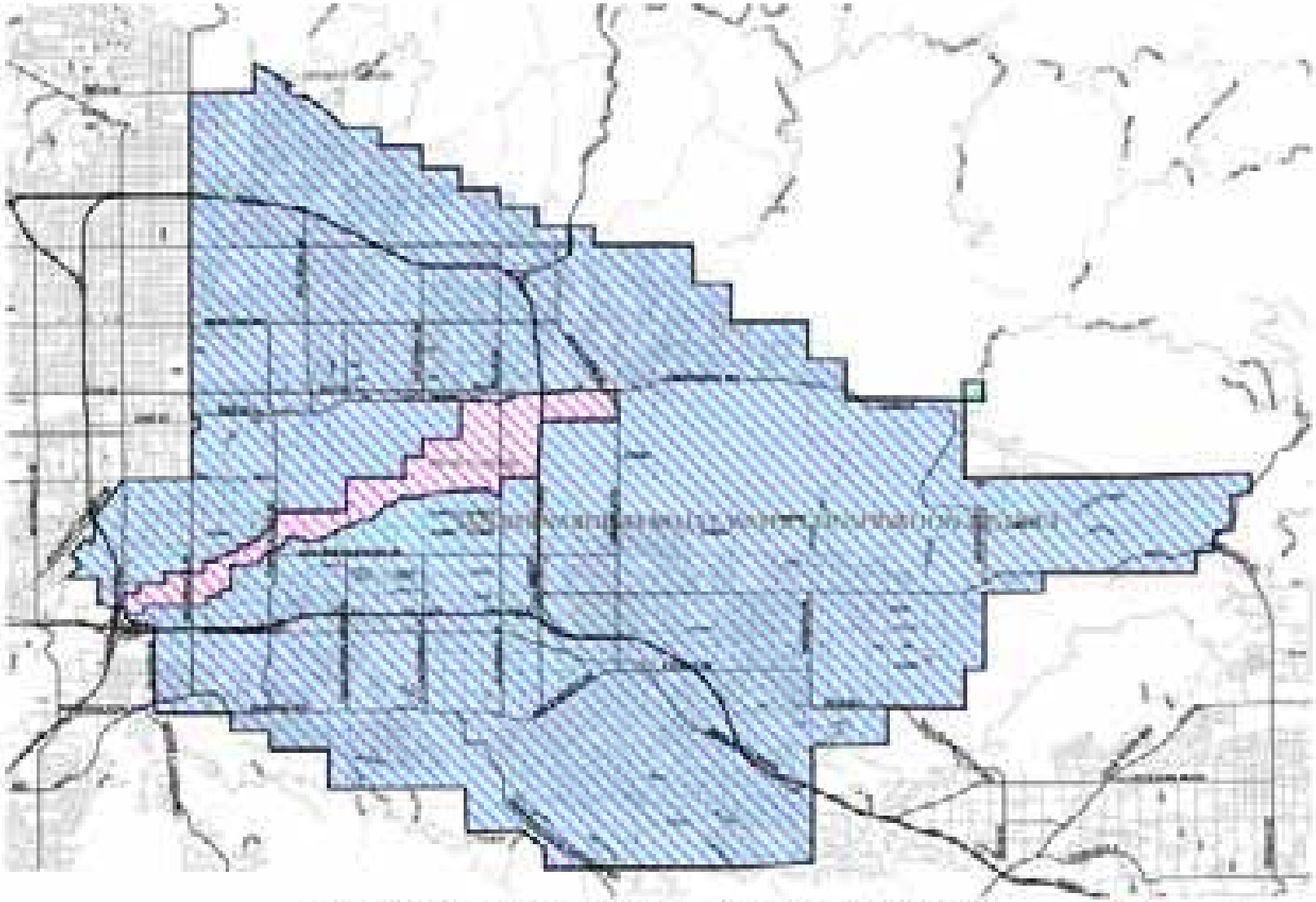
Attachments:

1. Maps of the District's boundaries, its Regional Location, and its Relationship to Cities, San Bernardino Valley Municipal Water District, and County Water Districts
2. Outline of a Water Conservation District Prepared by LAFCO Staff
3. Staff Report for LAFCO 2751, dated December 3, 1993
4. Survey Response Provided by the District Including the Appendix Materials Identified in the Staff Report
5. District Budget for 2004-2005, Budget for 2003-04 and Audit Report for 2003-2004

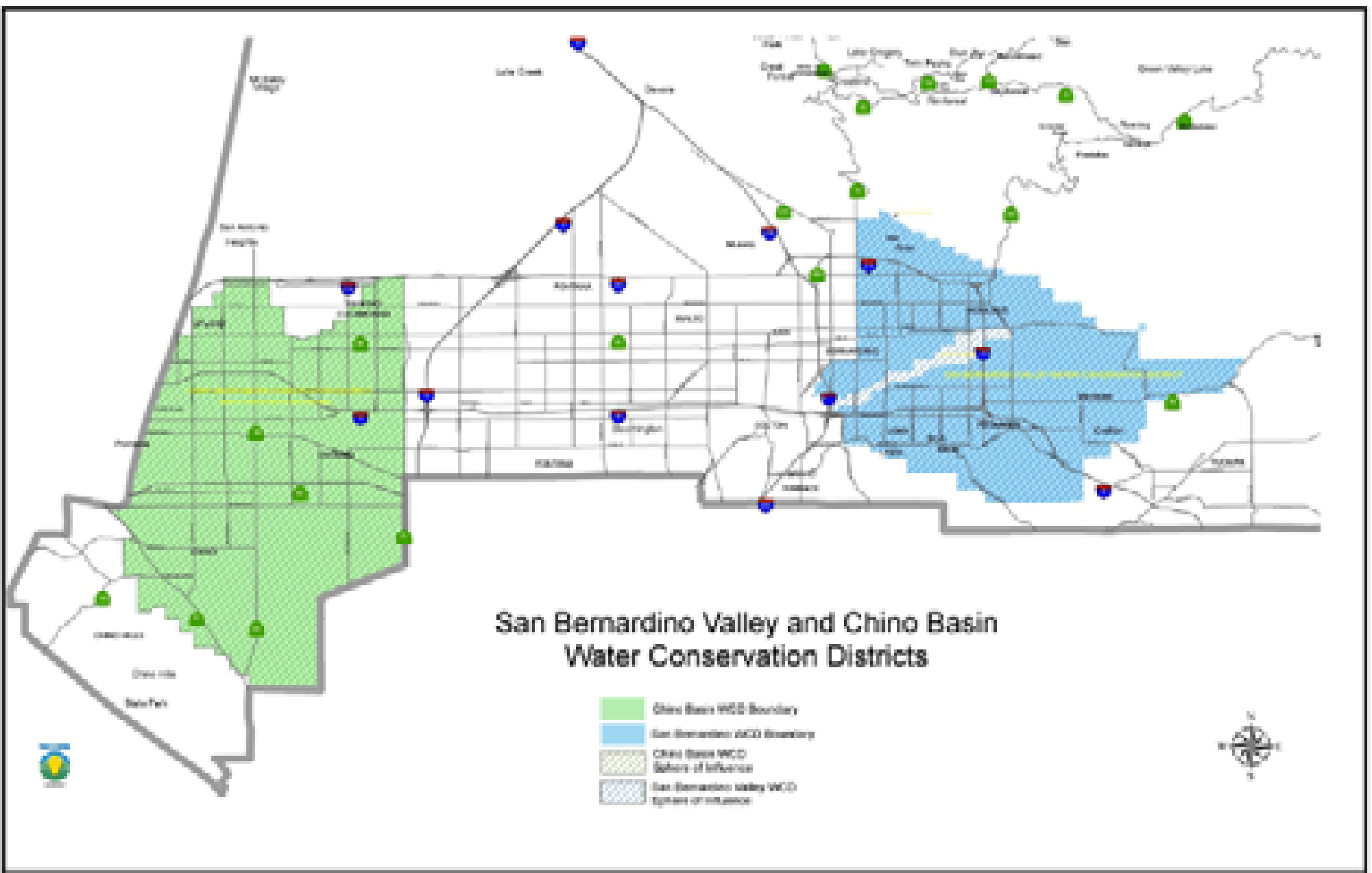
6. Response from Tom Dodson, Tom Dodson and Associates, LAFCO Environmental Consultant, Identifying Determination for Maintaining Existing Sphere of Influence Boundaries

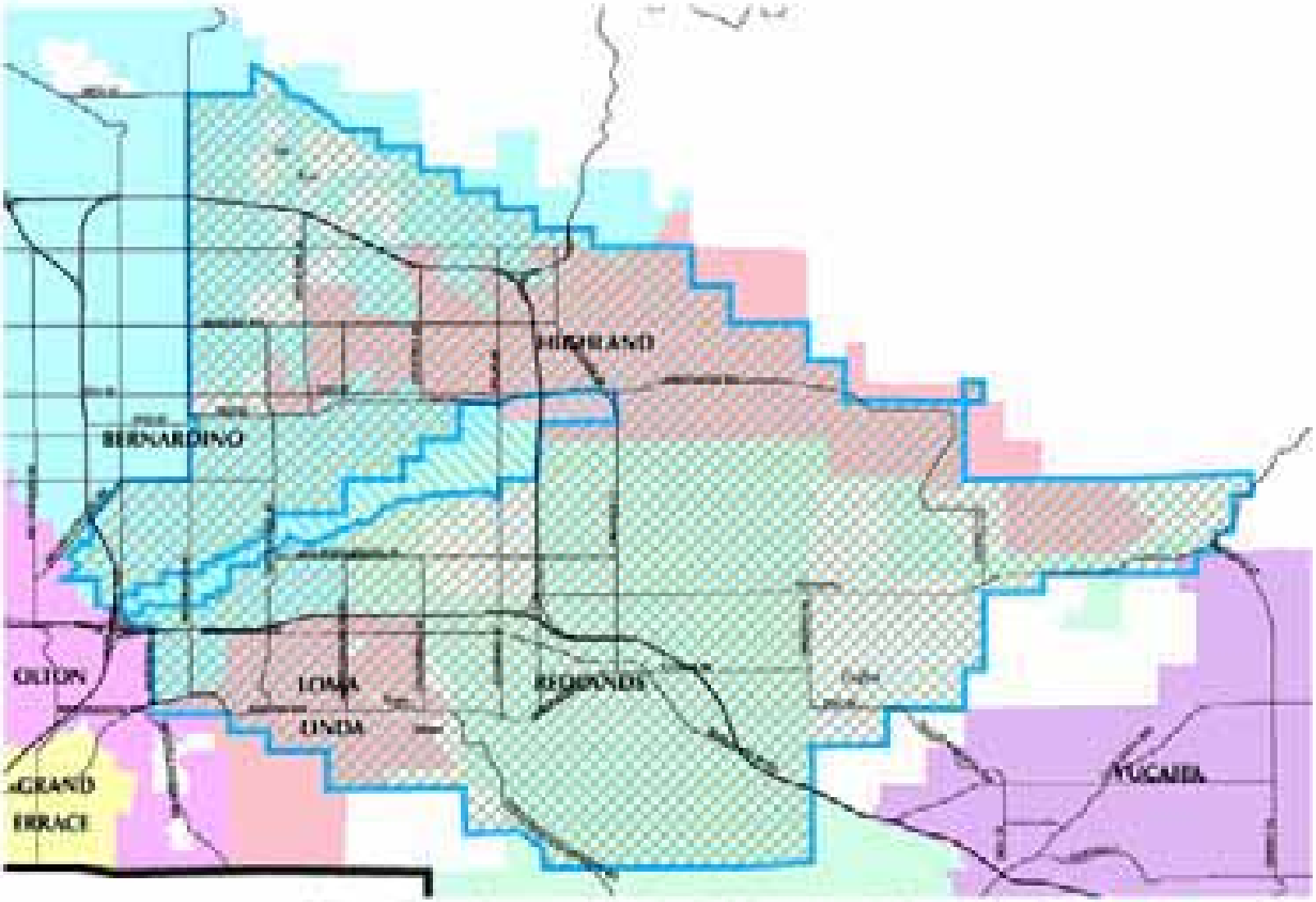
Maps of the District's Boundaries, it's Regional Location, and its Relationship to Cities, San Bernardino Valley Municipal Water District, and County Water Districts

Attachment 1

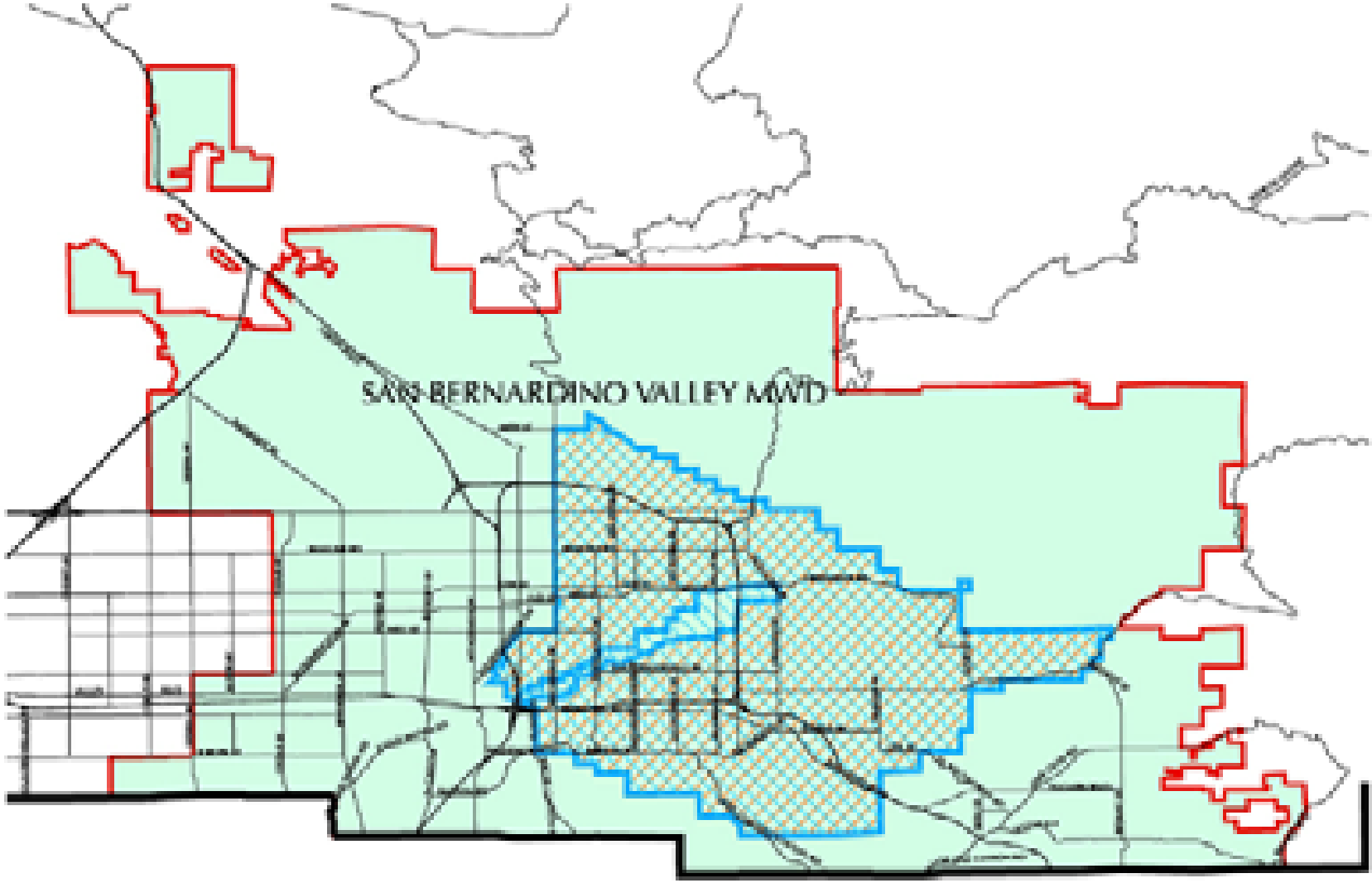


DISTRICT & SPHERE OF INFLUENCE BOUNDARIES
San Bernardino Valley Water Conservation District

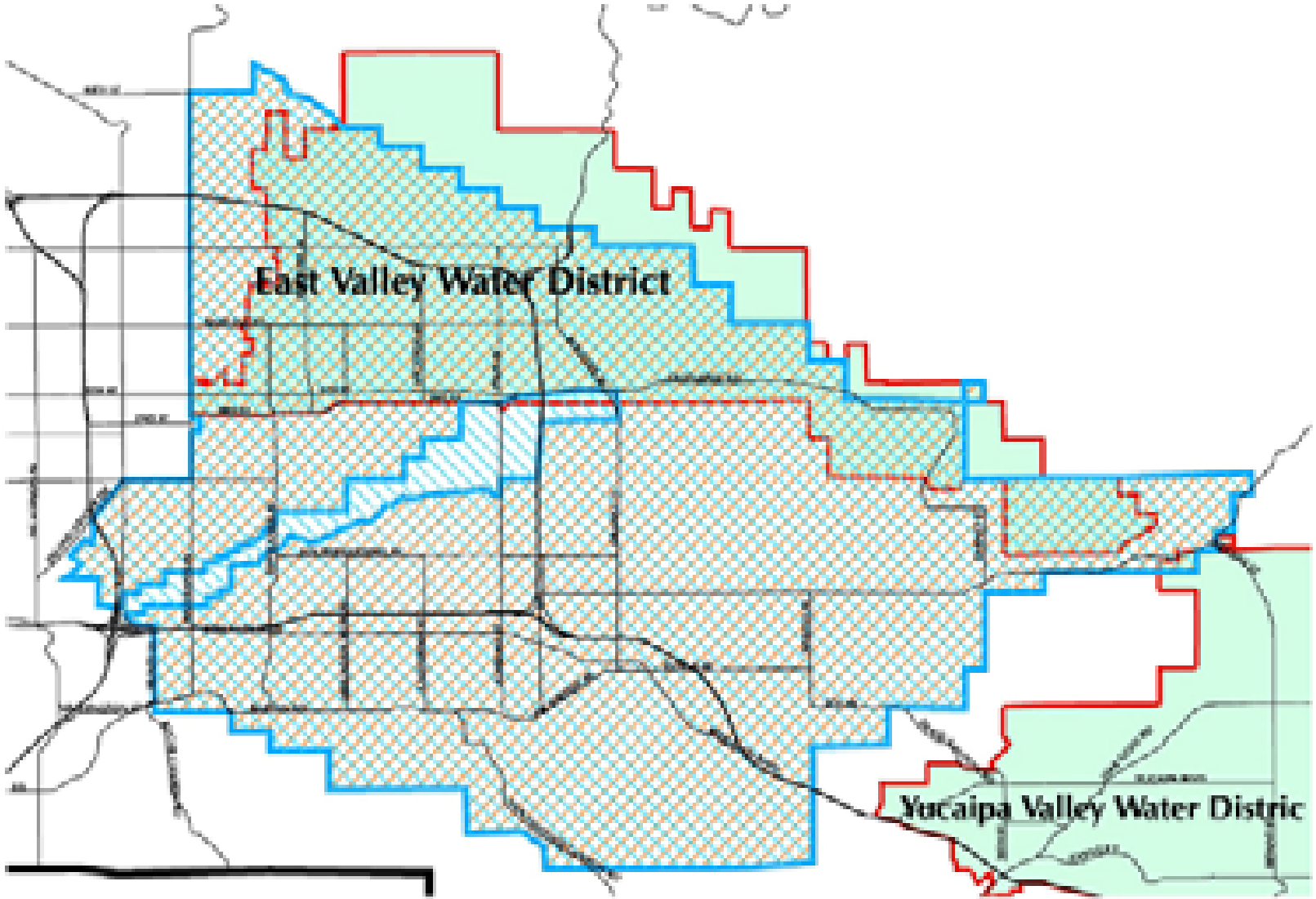

San Bernardino Valley and Chino Basin
Water Conservation Districts
Chino Basin WCD Boundary
San Bernardino WCD Boundary
Chino Basin WCD
Sphere of Influence
San Bernardino Valley WCD
Sphere of Influence



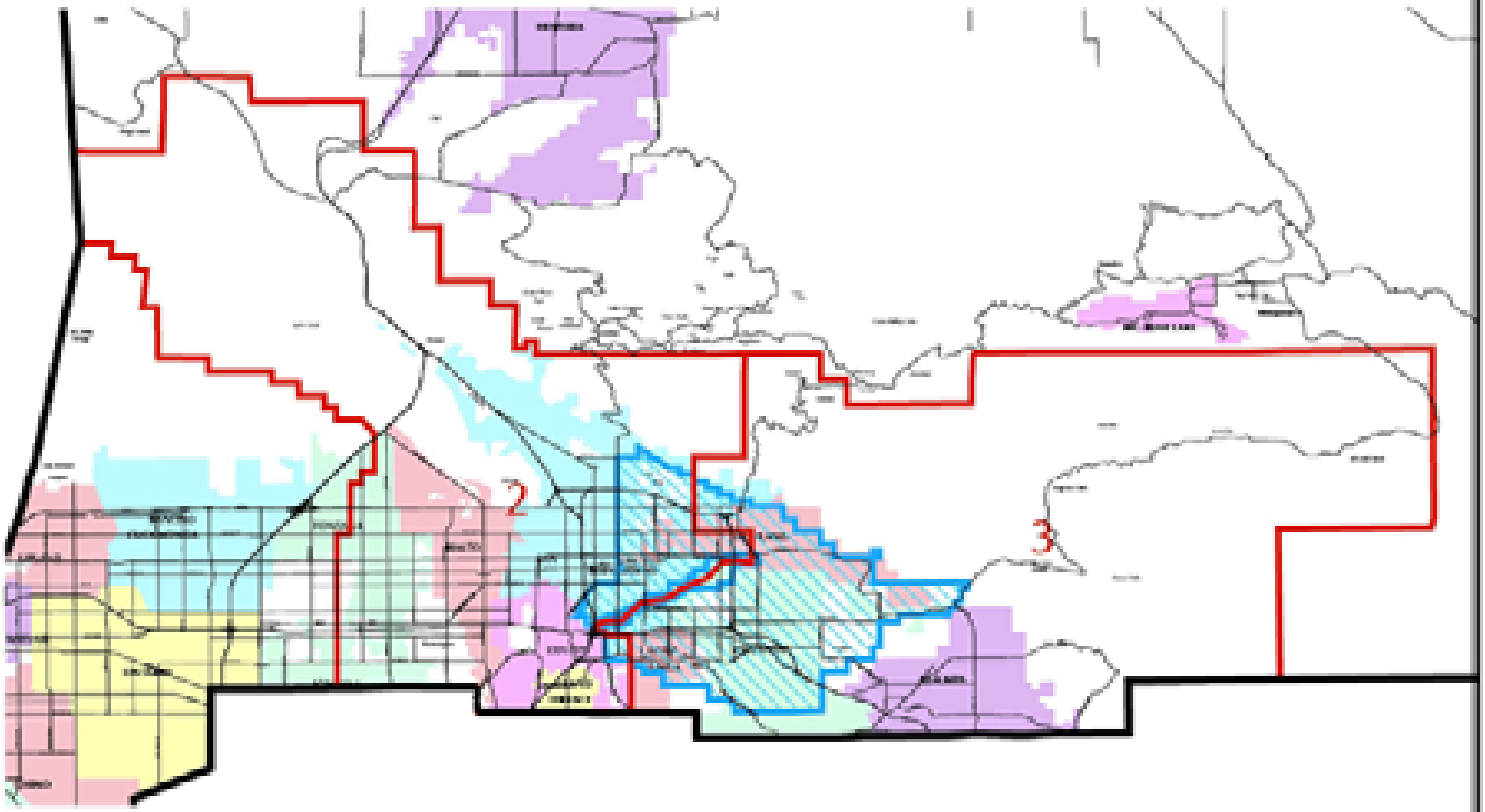
SAN BERNARDINO VALLEY WATER CONSERVATION DISTRICT
DISTRICT & CITY BOUNDARIES



SAN BERNARDINO VALLEY WATER CONSERVATION DISTRICT & SAN BERNARDINO VALLEY MWD BOUNDARIES



SAN BERNARDINO VALLEY WATER CONSERVATION DISTRICT
DISTRICT & WATER DISTRICT BOUNDARIES



SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT
ZONES 2 & 3

Outline of a Water Conservation District Prepared by LAFCO Staff

Attachment 2

WATER CONSERVATION DISTRICTS

(Water Code Sections 74000 through 76501)

WHAT IS A WATER CONSERVATION DISTRICT?

A Water Conservation District is a legal subdivision of the State of California formed essentially to provide for the conservation of water and water rights within an area comprising the whole, or parts thereof, of a watershed and/or streams and unnavigable rivers within which an area derives its water supply. The definitions, powers, and duties of these districts are outlined in the Water Conservation District Law of 1931 (as subsequently amended).

WHO GOVERNS A WATER CONSERVATION DISTRICT?

The governing body of a Water Conservation District shall be composed of a three, five, or seven member Board of Directors as outlined in the petition for the formation of the District. The District's boundaries are divided into the required number of divisions as specified for the Board of Directors and each division shall elect its Board representative. Members of the Board of Directors shall be registered voters within their respective division. Each division shall be equal, as closely as practicable, in the number of acres within them. Procedures for the redistribution of division boundaries are outlined in Water Code Sections 74430 through 74435.

WHAT KINDS OF SERVICES CAN A WATER CONSERVATION DISTRICT PROVIDE?

A Water Conservation District can provide any one, or combination, of the following services:

❶ Appropriation, acquisition and conservation of water and water rights for any useful purpose;

❷ Make surveys and investigations of the water supply and resources of the district;

❸ Acquisition and construction of dams, reservoirs, canals, conduits, spreading basins and sinking basins in order to conserve, store, spread and sink water;

❹ Provide for the construction, operation, and maintenance of such works, facilities and operations within or outside the District's boundaries to protect the land or property in the district from damage by flood or overflow;

❺ Drill, construct, install and operate wells, pumps pipelines, conduits, valves, meters and other appurtenances to such wells, etc. and may pump water therefrom for sale, delivery, distribution or other disposition;

❻ May sell, deliver, distribute or otherwise dispose of any water that may be stored or appropriated, owned or controlled by the district;

❼ May acquire, construct, maintain, and operate recreational facilities in connection with any dams, reservoirs or other works owned or controlled by the District.

HOW CAN YOU BE ANNEXED INTO (INCLUDED IN) AN EXISTING WATER CONSERVATION DISTRICT?

A Water Conservation District's boundaries may be expanded to include additional territory within its sphere of influence which is:

- Contiguous or non-contiguous territory for which benefit by inclusion in the District can be shown;

- Incorporated or unincorporated territory;

- Lands within one or more counties.

Proceedings for the annexation process are initiated and reviewed according to the provision of the Cortese-Knox Local Government Reorganization Act (Govt. Code Section 56000 et. seq.) which is administered by the Local Agency Formation Commission. The conduct of final hearings on the question of annexation are conducted pursuant to the Water Conservation District Law of 1931 (beginning with Water Code Section 75850 et. seq.).

Staff Report for LAFCO 2751, dated December 1993

Attachment 3

LOCAL AGENCY FORMATION COMMISSION
COUNTY OF SAN BERNARDINO

175 West Fifth Street, Second Floor
San Bernardino, CA 92415-0490 • (909) 387-5866 • Fax No. (909) 387-5871

DATE DECEMBER 3, 1993

FROM KATHLEEN ROLLINGS-McDONALD, LAFCO Analyst

TO LOCAL AGENCY FORMATION COMMISSION

SUBJECT **AGENDA ITEM #4** - LAFCO 2751 - Reorganization to include Annexations to the San Bernardino Valley Water Conservation District (Annexation #2)

INITIATED BY:

Resolution of the Board of Directors of the San Bernardino Valley Water Conservation District

RECOMMENDATION:

1. Adopt the Negative Declaration and the De Minimus Impact Finding regarding Department of Fish and Game Fees; respond to any comments received in reference to the Negative Declaration; and instruct the Clerk to file a Notice of Determination and the Certificate of Fee Exemption within five days;

2. Approve LAFCO 2751 as submitted, with the condition that the San Bernardino Valley Water Conservation District shall pay all litigation costs associated with the approval of LAFCO 2751; or,

   If the District and water producers within Parcel A have completed their negotiations and adopted the annexation agreement, modify the proposal to omit Parcel A as requested by the District;

3. Designate the San Bernardino Valley Water Conservation District as the conducting authority for further proceedings; and,

4. Adopt LAFCO Resolution #2433 reflecting the Commission's findings and determinations.

STAFF REPORT - LAFCO 2751
DECEMBER 3, 1993

BACKGROUND:

The Commission has been presented with a proposal initiated by the Board of Directors of the San Bernardino Valley Water Conservation District in April 1993 to annex two separate areas which comprise the District's existing sphere of influence. These two areas are identified on Attachment I and are generally defined as:

> **Parcel A:** Includes approximately 1,980 acres and is predominantly located in the Santa Ana River bed. The area is generally bordered by "E" Street in the City of San Bernardino on the west, Norton AFB within the City of San Bernardino and City of Highland on the north; Orange Street within the City of Redlands on the east, and existing District boundaries within the Cities of San Bernardino and Redlands on the south. This area contains 25 registered voters and the bulk of the water production facilities within the reorganization. The General Plans of the Cities of Redlands, Highland and San Bernardino apply varying levels of open space, flood control, commercial and residential uses within this area.
>
> **Parcel B/C:** Includes approximately 2,929 acres and is generally bordered on the west by Waterman Avenue; on the north by a combination of 40th Street, David Way, the San Bernardino National Forest boundary, and parcel lines; on the east by existing District boundaries, and on the south by a combination of Baseline, parcel boundaries and Highland Avenue. The whole of this territory is within the boundaries or sphere of influence of the City of San Bernardino. This area contains 12,306 registered voters. The General Plans of the City of San Bernardino and the County of San Bernardino apply varying levels of residential and commercial uses within this area.

The proposal presented is the first annexation by the Water Conservation District which has been reviewed by LAFCO; therefore, a brief discussion of the purposes and functions of a Water Conservation District seems appropriate. A Water Conservation District is formed in order to provide for the "conservation of water and water rights within an area comprising the whole, or a part, of a watershed". The service area of the San Bernardino Valley Water Conservation District is essentially confined to the eastern portion of the Bunker Hill Basin, as shown on the map included as Attachment II. The activities of the District to replenish the groundwaters of this basin have been performed through the spreading of District-owned water rights on District-owned lands in the upper reaches of the Santa Ana River. The

District has been operating for the last sixty years within its existing boundaries.

The District has indicated in its resolution of application the reasons for proposing this reorganization, generally summarized as follows:

1. The District's present groundwater replenishment activities will be enhanced and its proposed activities will be more effective, if all the lands within the District's sphere are included within its boundaries;

2. The present and future residents of these areas will benefit from a more comprehensive and uniform groundwater management, water quality and replenishment program if the areas proposed for reorganization are annexed to the District; and,

3. The lands within the proposed reorganization presently derive benefit from the District's groundwater replenishment activities and will benefit from the proposed groundwater quality, replenishment and management activities.

A review of the factors contained in Govt. Code Section 56841 against the limited services provided by the Water Conservation District indicate that the areas are affected by and/or benefit from the water conservation efforts of the District; the lands included in this reorganization are a part of the drainage basin which, in general, defines the Water Conservation District; and these areas will continue to rely on the services offered by the District through its efforts to maintain the groundwater levels of the basin within its boundaries.

The primary controversy involved with this proposal has been the imposition of a "groundwater charge" by the District. This charge took effect as of July 1, 1993 for the period July 1, 1993 through June 30, 1994. Resolution No. 318 adopted by the District implements this groundwater charge and sets forth the zone (the existing boundaries of the District) to be used for its imposition.

The Commission has continued this proposal on two separate occasions to allow the District to attempt to alleviate the areas of concern expressed by the primary water producers within these areas. In response to this issue, the District has successfully negotiated a pre-annexation agreement with the City of San Bernardino and its Municipal Water Department which has eliminated their concerns regarding this project (Attachment IV). In addition, the District has had ongoing negotiations with the major

out-of-county water producers which have facilities within parcel A of this proposal. Included as Attachment V are the letters received from the City of Riverside, and Meeks and Daley Mutual Water Company's attorney outlining their opposition to the District's annexation and contesting this groundwater charge. The receipt of these comments set in motion the negotiations on the annexation agreement. The District has asked that if the agreement is signed by all parties prior to the Commission's hearing on this proposal, that its provision regarding omission of Parcel A be accommodated. If, however, the agreement is not signed, the District wishes to proceed with the reorganization as originally submitted.

Based upon the controversy generated by the question of the Water Conservation District's groundwater charge (pump tax), the staff has reviewed the provision of such a charge as outlined in Water Code Sections 75500 et seq. These provisions are unique in the sense that they apply only one water year at a time and require specific procedures for implementation. It is the staff's position that based upon the specificity of these procedures for annual implementation that the Commission has no authority over the question of imposing or not imposing this groundwater charge on the newly annexed territory.

This position is based in part upon the finding that the procedures for a groundwater charge require an annually prepared engineering report, public hearings by the District, and the establishment of a zone within which it is to be imposed. If these procedures are not adhered to, the charge is terminated. It is the staff's position that the Commission would, therefore, have no authority to condition that the District impose this charge since the District's decision is to be based upon the findings of its annually required engineering report. In light of this finding, it is the staff's position that the questions posed by the City of Riverside and the attorneys on behalf of the Meeks and Daley Mutual Water Company are more appropriately addressed by the District during its review of the question of imposing this charge for the upcoming water year.

The Water Conservation District has requested, and the pre-annexation and annexation agreements contain provisions which request, that the Commission acknowledge their existence. As outlined above, the staff does not believe that the terms of these agreements which relate to questions regarding the groundwater charge are within the Commission's jurisdiction. However, to acknowledge the good faith efforts of the District to resolve these concerns the staff is proposing that as a finding of the Commission's resolution that these agreements be recognized.

CONCLUSION:

Since the Commission has no jurisdiction over the question of the groundwater charge and its related controversy, in the staff view, the questions related to this reorganization must be evaluated from the perspective of the factors outlined in Government Code Section 56841.

1. The areas are a part of the watershed which, in a general sense, defines the service area of the Water Conservation District.

2. The areas have benefitted in the past, to some degree, and will benefit in the future from the water replenishment and augmentation operations of the District. The lands within the areas of proposed reorganization are affected by the activities of the District.

3. The controversy surrounding the imposition of the groundwater charge is an issue to be addressed and fought in another arena. However, the 1969 stipulated judgement which set forth the extraction levels for the various agencies based upon the safe yield of the Bunker Hill Basin included the water replenishment activities of the Water Conservation District. Curtailment of the activities of the District, as would be required by a loss of funding, would have an effect on the Bunker Hill Basin and would, in all probability, impact all water producers in the area.

4. Approval by the Commission and successful completion of this reorganization will allow an additional 12,333 voters to participate in the selection of the Board of Directors of the SBVWCD and through their elected representative participate in the decisions being made which impact their source of water.

The staff supports the approval of the reorganization presented by the Water Conservation District on the basis of the factors outlined above.

FINDINGS:

1. The reorganization area is legally inhabited as certified by the County Registrar of Voters. Parcel A contains 25 voters, and Parcel B/C contains 12,308 voters.

2. The reorganization areas are within the sphere of influence assigned the Water Conservation District.

3. The County Assessor has determined that the value of land and improvements for the reorganization is $710,137,105. The value of land and improvements by parcel is: Parcel A - $33,720,761, and Parcel B/C - $676,416,344.

4. Notice of the Commission's hearing has been published in a newspaper of general circulation in the area as required by law. In addition, individual notices have been provided to the City of Riverside, Meeks and Daley Water Company, City of San Bernardino, San Bernardino Municipal Water Department, the City of Highland and other agencies known to be interested in this proposal.

5. The County General Plan and the General Plans of the affected cities indicate varying levels of residential development, open space, flood control, and commercial uses. This proposal does not conflict with, or have the potential to alter, these assigned land use designations.

6. The San Bernardino Valley Water Conservation District has provided a Plan for the Extension of Services as required by law. This plan provides an outline of the services provided by the District through its water replenishment activities and an indication that the District may impose a groundwater charge.

   This Plan for Services was prepared prior to the finalization of the creation of the groundwater charge zone. The area of consideration will be included in the processing for the engineering studies necessary to determine the implementation of a groundwater charge for the next water year should the District pursue such a charge.

   The District's plan for services is attached as a part of Attachment III for Commission review in conformance with its adopted policy.

7. The reorganization areas are presently served in whole, or in part, by the following local agencies:

   County of San Bernardino
   City of San Bernardino
   City of Highland
   City of Redlands
   San Bernardino Valley Municipal Water District

East Valley Water District
County Service Area SL-1
County Service Area 38 and its Improvement Zones G, L, and P (fire protection and rescue services)
County Service Area 70 and its Improvement Zone A

None of these agencies will be affected by the proposed change specifically. Those agencies which provide retail water service and who have wells within the area of consideration may be affected by the groundwater charge should the District determine to include them within the zone for the ensuing water year. The agencies which provide retail water service and are known to have production facilities within the reorganization area are: City of San Bernardino, City of Redlands, and East Valley Water District (within San Bernardino County) and the City of Riverside, Agua Mansa Mutual Water Company, Meeks and Daley Mutual Water Company, and Riverside Highland Mutual Water Company (water producers with service areas outside the County of San Bernardino).

The City of San Bernardino's Municipal Water Department does have wells within the areas proposed for reorganization and has entered into a pre-annexation agreement with the Water Conservation District which outlines an agreed to formula and conditions on the implementation of the groundwater charge. This pre-annexation agreement is included in the staff report as Attachment IV.

The SBVWCD has been negotiating with the out-of-county water producers with facilities in Parcel A. These negotiations have been set out in the Annexation Agreement between the District and these agencies which is included in the staff report as a part of Attachment IV. At the time of this report, the District and two of the four agencies have indicated their support and have signed this agreement.

As outlined in other areas of this report, it is the staff's position that the Commission has no jurisdiction over the terms and conditions of these pre-annexation agreements based upon the provision of Water Code Section 75500 et seq. regarding the imposition of a groundwater charge. However, it is the request of the parties involved that the existence of these agreements be acknowledged by the Commission.

8. The Commission's environmental consultant, Tom Dodson and Associates, has reviewed the proposal and recommended the issuance of a Negative Declaration indicating that the

proposal will not have a significant effect on the environment. Notice of the Commission's intent to adopt this Negative Declaration has been circulated pursuant to the provisions of CEQA. A copy of the initial study and any comments received during this notice period have been responded to and are a part of the environmental documents provided to the Commission as Attachment VI. The staff's recommendation is that the Commission adopt the Negative Declaration and the De Minimus Impact Finding and instruct the Clerk to file the Notice of Determination and Fee Exemption within five days.

9. The reorganization area has benefitted in the past, and will benefit in the future from the services and activities of the Water Conservation District regarding water replenishment of the eastern portion of the Bunker Hill Basin.

10. This proposal and its anticipated effects conform with adopted Commission policies.

11. All notices required by law have been provided. Protest has been received from the City of Riverside, and from the law firm of Aklufi and Wysocki on behalf of the Meeks and Daley Mutual Water Company and Agua Mansa Water Company.

12. The County has adopted a tax resolution, as required by law, outlining that there will be no exchange of ad valorem property tax revenues occasioned by this reorganization.

13. The County Surveyor has certified that the map and legal description meet state standards.

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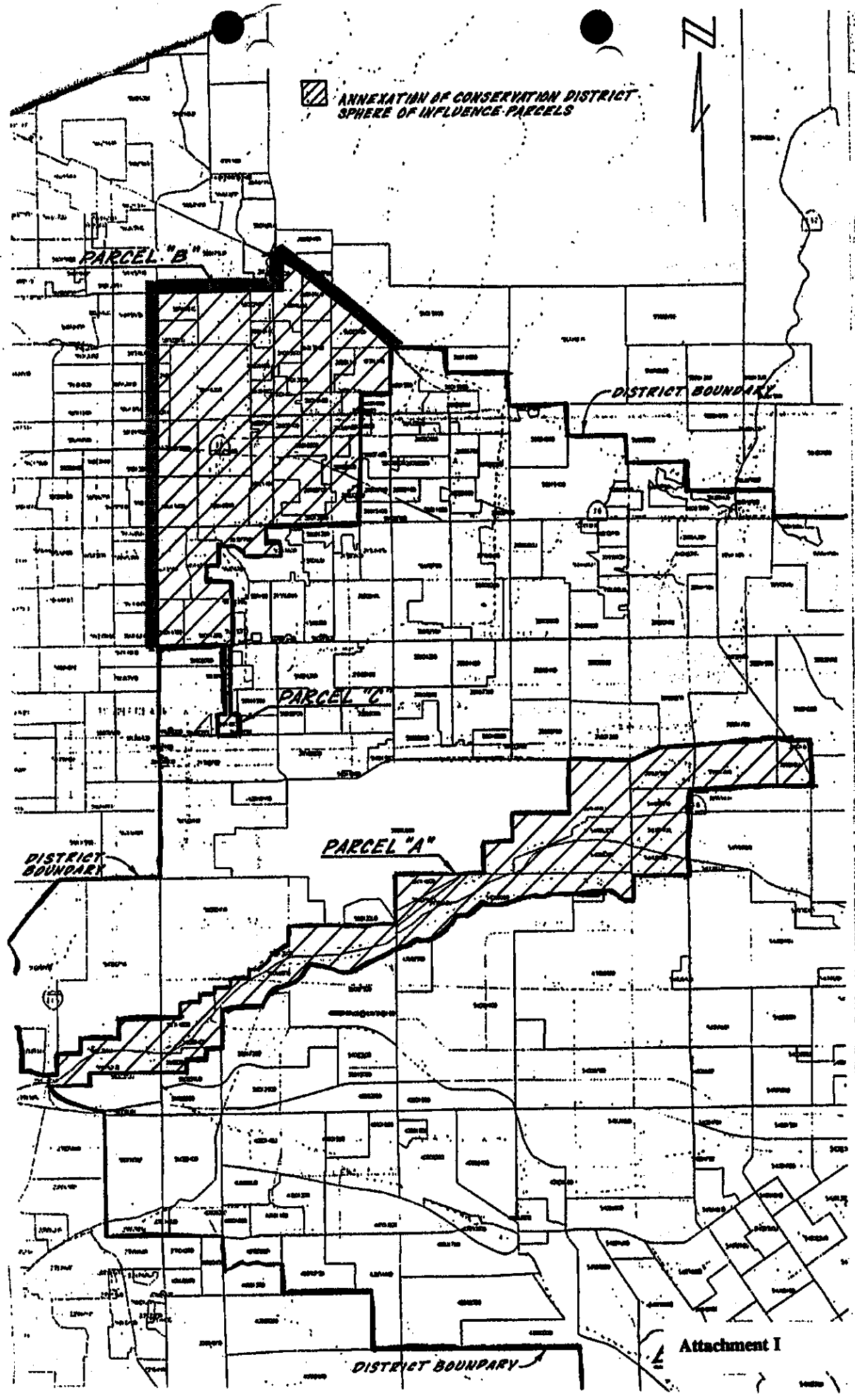
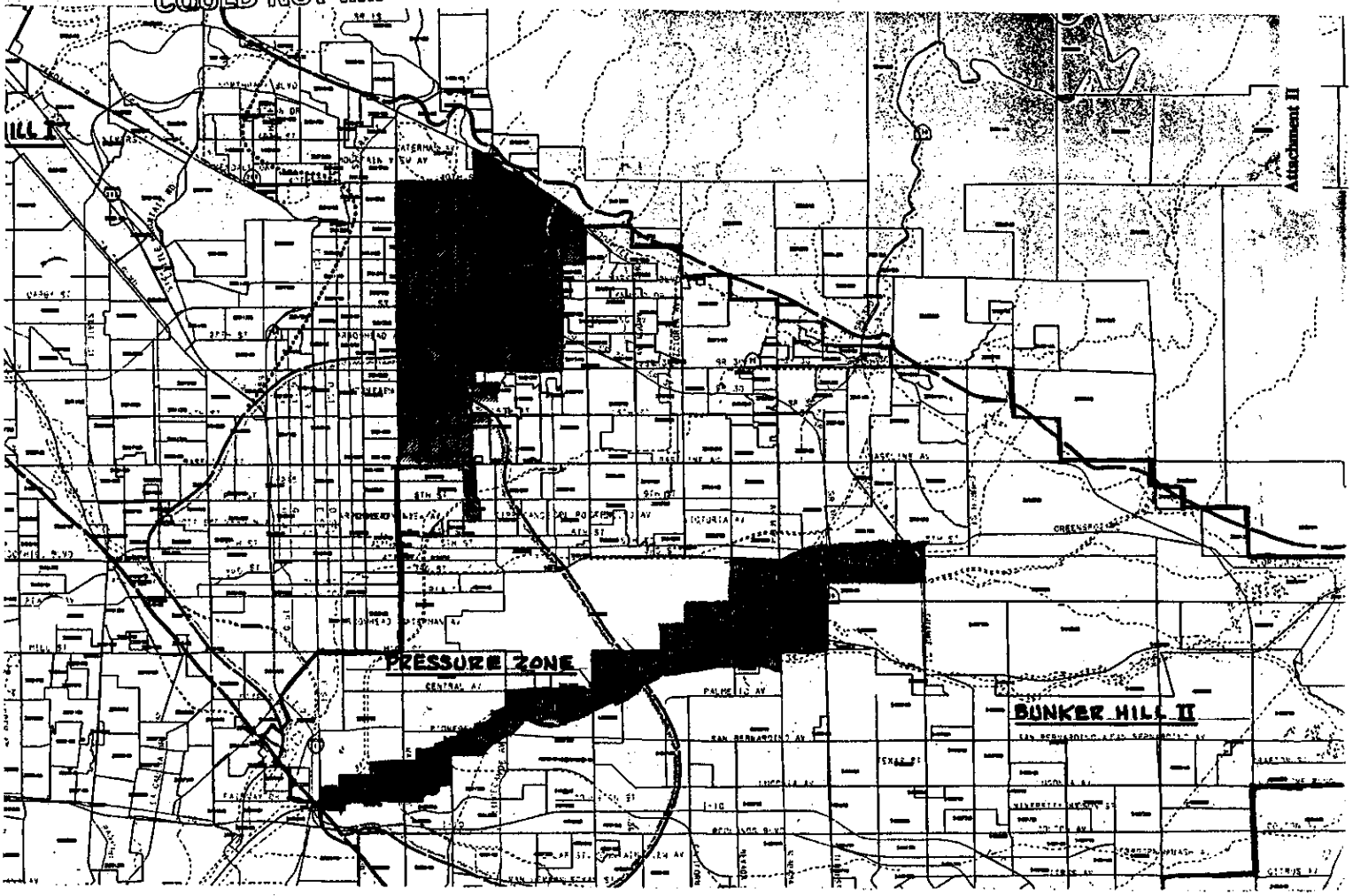
Attachments:

I - Map of the Proposed Reorganization
II - Map showing Relationship of District and Reorganization to the Bunker Hill Basin
III - District Application and Plan for Services
IV - Pre-Annexation and Annexation Agreements V - Letters of Protest
VI - Proposed Negative Declaration and Initial Study

POOR QUALITY ON ORIGINAL
COULD NOT IMPROVE



Attachment I



Attachment II

POOR QUALITY ON ORIGINAL
COULD NOT IMPROVE

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Plan for Services

The San Bernardino Valley Water Conservation District (the "District") is a Water Conservation District formed and operating under the Water Conservation District Law of 1931, as amended, California Water Code Section 74000, et seq. For over eighty years, the District has undertaken groundwater replenishment activities for the purpose of increasing the availability of groundwater to the lands and water users overlying the Bunker Hill Basin in San Bernardino County.

This District owns in excess of 1,300 acres of land comprising the Santa Ana River bed and adjacent lands in the vicinity of the Cities of Highland and Redlands. This District also holds water rights to a portion of the flows of the Santa Ana River. The District conducts its groundwater replenishment activities by exercising its water rights to divert and capture the flows of the Santa Ana River, and spread such waters within the District's lands such that the waters percolate into and replenish the Bunker Hill Basin.

The District's historical and ongoing water replenishment activities currently provide significant benefit to the lands within the affected territories, and allow the water users within such affected territories to produce substantial quantities of groundwater at a relatively low cost. The affect territories will continue to obtain this water supply benefit upon and after the effective date of the proposed annexations.

The District is increasing its water replenishment activities, through the development of enhanced facilities within and adjacent to the Santa Ana River near Redlands and Highland, for the percolation of diverted and captured Santa Ana River flows. These facilities are anticipated to be developed incrementally over the next fifteen years, as the result of District projects and the completion of private sand and gravel excavations on District lands pursuant to leases. The development of these facilities, and the consequent increased replenishment of groundwater, will benefit all of the lands and water users overlying the Bunker Hill Basin, including the affected territories.

The District is currently considering the commencement of a groundwater quality monitoring program, as well as groundwater management activities, in order to increase the availability of useable groundwater to the lands and water users overlying the Bunker Hill Basin, including the affected territories. The District presently intends to make a determination whether to commence such activities during calendar year 1993. The District will also consider whether to finance such services by means of a groundwater charge pursuant to Water Code Section 75500, et seq.

Dated: April 7, 1993

Nereus L. Richardson

Nereus L. Richardson, General Manager

FACTORS OF CONSIDERATION

PRESENT AND PLANNED LAND USES IN THE AREA

Currently Parcel A includes the Santa Ana River and much of the land is owned by the Flood Control District. The River area will be maintained for the routing of Santa Ana River flood flows out of the area. The land uses on the north side of Parcel A are mostly residential area within the City of San Bernardino. The land uses on the south side of Parcel A represent urban uses in Loma Linda and Redlands. Parcel B/C is in the City of San Bernardino and is currently all urban use.

THE PRESENT AND PROBABLE NEED FOR PUBLIC FACILITIES AND SERVICES IN THE AREA

Parcel A currently has public facilities that are provided by the City of San Bernardino on the north side and by the Cities of Loma Linda and Redlands on the south side. The center strip of Parcel A is in the flood plain of the Santa Ana River and additional flood control facilities may be needed in the future. This is addressed in the U.S. Army Corps of Engineers' Santa Ana Mainstem Project. Parcel B/C is currently served by the City of San Bernardino and future needs would only involve the extension of those facilities to new developments within that area.

THE PRESENT CAPACITY OF PUBLIC FACILITIES AND ADEQUACY OF PUBLIC SERVICES

The north portion of Parcel A is in the City of San Bernardino and all public facilities are provided by that city. The area on the south side of Parcel A is in the Cities of Loma Linda and Redlands and public facilities are provided by those cities. The area in Parcel B/C is in the City of San Bernardino and the city currently provides public facilities. It is believed that all public facilities in the area are adequate.

THE EXISTENCE OF ANY SOCIAL OR ECONOMIC COMMUNITIES IN THE AREA

Parcel A lies between the communities of San Bernardino on the north and Loma Linda and Redlands on the south. Since the city boundaries essentially touch in this area, it not expected any new social or economical community will develop in this area. Parcel B/C is totally within the City of San Bernardino and this will continue to be the social and economic community for this parcel.

AGREEMENT REGARDING ANNEXATION OF CITY OF SAN BERNARDINO TERRITORY TO THE SAN BERNARDINO VALLEY WATER CONSERVATION DISTRICT

THIS AGREEMENT is entered into as of August 2, 1993, by and between the SAN BERNARDINO VALLEY WATER CONSERVATION DISTRICT, a special governmental district formed and operating under the Water Conservation District Law of 1931, as amended, California Water Code Section 74000, et seq. (hereinafter, the "District") and the CITY OF SAN BERNARDINO, a municipal corporation (hereinafter, the "City"), and the BOARD OF WATER COMMISSIONERS OF THE CITY OF SAN BERNARDINO (hereinafter "Board").

RECITALS

A. For over eighty years, the District and its predecessor-in-interest have conducted groundwater replenishment activities for the purpose of conserving local water supplies and increasing the supply of groundwater for the lands and residents within the boundaries of the District.

B. The City boundaries include approximately 2,166 acres of real property situated adjacent to but outside of the boundaries of the District, but within the "sphere of influence" of the District as designated by the Local Agency Formation Commission of the County of San Bernardino (hereinafter, "LAFCO") pursuant to Government Code Section 56425, et seq., which lands are more particularly described in Exhibit "A" attached hereto and incorporated herein by this reference (such lands are hereinafter referred to as the "Subject Territory").

C. The City and Board operate seven (7) water producing facilities within the Subject Territory, which water producing facilities produce groundwater from the groundwater basin which underlies the District and other lands.

D. In accordance with Water Code Section 75500, et seq., the District has levied a groundwater charge on groundwater produced from facilities located within the boundaries of the District (hereinafter, the "Groundwater Charge").

E. In accordance with Government Code Section 56650, et seq., the District has adopted its Resolution No. 314, making application to LAFCO for the annexation of approximately 4,908.8 acres of land to its boundaries, all of which are within the District's sphere of influence, and including the Subject Territory (the proposed annexation of the Subject Territory to the District's boundaries is hereinafter referred to as the "Subject Annexation").

F. The District, the City, and the Board mutually desire to enter into this Agreement to set forth the conditions governing the Subject Annexation.

EXECUTORY AGREEMENTS

NOW, THEREFORE, in consideration of the facts recited above, and the covenants, conditions and promises contained herein, the parties hereto agree as follows:

SECTION ONE: ANNEXATION OF THE SUBJECT TERRITORY TO THE DISTRICT

1.1 The District shall take all reasonable actions to pursue and complete the annexation of the Subject Territory to the District.

1.1.1 The District shall submit the terms and conditions of this Agreement as part of the proposed terms and conditions of the Subject Annexation.

1.1.2 The District shall request that LAFCO incorporate this Agreement into its resolution making determinations with respect to the Subject Annexation.

1.2 Neither City nor Board shall oppose, file any protest to, initiate any legal or administrative proceeding to challenge, or otherwise take any action to hinder or interfere with the annexation of the Subject Territory to the District in accordance with this Agreement.

SECTION TWO: LEVY AND COLLECTION OF GROUNDWATER CHARGES FROM GROUNDWATER PRODUCTION FROM WITHIN THE SUBJECT TERRITORY

2.1 The Subject Territory shall be subject to the levy and collection of the Groundwater Charge from and after the effective date of the Subject Annexation. From and after the date on which the Subject Territory is subject to a Groundwater Charge, the City and the Board shall file all groundwater production reports, and make all payments for groundwater production, in accordance with Water Code Section 75610, et seq.

2.2 In the event that the District determines at any time during the term of this Agreement to levy and collect a Groundwater Charge in an amount in excess of Ten Dollars ($10.00) per acre-foot of groundwater produced by the City or the Board from within the Subject Territory (as adjusted in accordance with Paragraph 2.2.2

below), and the City or the Board does not consent in writing to such Groundwater Charge, the District shall, within thirty (30) days following the receipt by the District of the City's or the Board's payment of such Groundwater Charge, reimburse to the City or the Board an amount equal to the Annexation Reimbursement.

2.2.1 For purposes of this Paragraph 2.2, the term "Annexation Reimbursement" shall be calculated for a six-month period set forth in Water Code Section 75611 (i.e., January 1 through June 30; July 1 through December 31) in accordance with the following formula:

AR = (GW - B) x AF

Where:

AR = the Annexation Reimbursement amount.

GW = the Groundwater Charge levied by the District upon groundwater production by the City or the Board from groundwater producing facilities located within the Subject Territory.

B = the Base Groundwater Charge, in the amount of $10.00 per acre-foot of groundwater produced by the City or the Board from groundwater producing facilities located within the Subject Territory, adjusted in accordance with Paragraph 2.2.2 below.

AF = the quantity (in acre-feet) of groundwater produced by the City or the Board from groundwater producing facilities located within the Subject Territory.

2.2.2 The Base Groundwater Charge described in Paragraph 2.1.1 above shall be adjusted annually in accordance with the "Consumer Price Index for Urban Wage Earners and Clerical Workers Los Angeles-Anaheim-Riverside Area (All Items)" (hereinafter, the "CPI"), compiled by the United States Department of Labor, Bureau of Labor Statistics (1982-1984 = 100), or such successor index as may be published by the United States Department of Labor in lieu of the CPI; provided, however, that the Base Groundwater Charge shall not increase by an amount in excess of two percent (2.0%) annually, notwithstanding any higher increase in the CPI. In the absence of the CPI or any successor index, the parties shall jointly select an alternative index, subject to the same maximum annual increase.

2.3 In the event that the City and the District, or the Board and District as the case may be, mutually determine in writing that groundwater production by City or the Board within the Subject

Territory is for the purpose of removing non-naturally occurring contamination, non-naturally occurring pollution, or other non-naturally occurring substances impairing the use of groundwater, that the groundwater production is for domestic, potable uses, and that the well head treatment facilities used for such activities are funded entirely with public monies, District shall reimburse to the City or the Board an amount equal to the Groundwater Charge assessed against such publicly funded groundwater production.

2.4 In the event that the District enters into an annexation agreement with the City of Riverside, a municipal corporation, which establishes the condition of capping the Groundwater Replenishment Charge on all of the City of Riverside's water production within the District's current boundaries, then the parties shall amend this agreement to provide that the same provision shall apply to the City and the Board.

SECTION THREE: MISCELLANEOUS

3.1 Notices: Except as otherwise set forth hereinabove, all notices, payments, transmittals of documentation and other writings required or permitted to be delivered or transmitted to any of the parties under this Agreement shall be personally served or deposited in a United States mail depository, first class postage prepaid, and addressed as follows:

If to District: San Bernardino Valley Water Conservation District
101 E. Redlands Blvd., Suite 247
P.O. Box 1839
Redlands, California 92373-0581
Attn: General Manager

If to City: City of San Bernardino
300 North "D" Street
San Bernardino, CA 92418
Attn: City Administrator

If to Board: Board of Water Commissioners
300 North "D" Street
5th Floor
San Bernardino, CA 92418
Attn: General Manager

or such other address as either party may direct to the other in writing. Service of any instrument or writing shall be deemed completed forty-eight (48) hours after deposit in a United States mail depository.

3.2 Condition Subsequent and Term: This Agreement shall be subject to the condition subsequent that the Subject Annexation is completed. Thereafter, this Agreement shall continue for so long as the Subject Territory is within the boundaries of the District.

3.3 Warranty of Authority: Each officer of the District, the Board, and the City affixing his or her signature to this Agreement warrants and represents by such signature that he or she has the full legal authority to bind his or her respective party to all of the terms, conditions and provisions therein, that his or her respective party has the full legal right, power, capacity and authority to enter into this Agreement and perform all of its provisions and obligations, and that no other approvals or consents are necessary in connection therewith.

3.4 Headings: The titles and headings of Sections and Paragraphs of this Agreement, as herein set forth, have been inserted for the sake of convenience only, and are not to be taken, deemed or construed to be any part of the terms, covenants or conditions of this Lease, or to control, limit or modify any of the terms, covenants or conditions hereof.

3.5 Integration, Construction and Amendment: This Agreement constitutes the entire understanding of the District, the Board, and the City as to those matters contained herein, and no prior oral or written understanding shall be of any force or effect as to those matters covered by this Agreement. This Agreement shall be governed by the laws of the State of California, and shall be construed as if drafted by all parties hereto. Except as provided herein, this Agreement may not be modified, altered or amended except in writing signed by the District, the Board, and the City.

3.6 Successors: This Agreement, and all of the terms, conditions and provisions herein, shall inure to the benefit of, and be binding upon, the District, the Board, and the City, and their respective successors and assigns.

IN WITNESS WHEREOF, the parties have executed this Agreement

A RESOLUTION OF THE MAYOR AND COMMON COUNCIL OF THE CITY OF SAN BERNARDINO, APPROVING A PREANNEXATION AGREEMENT WITH THE SAN BERNARDINO VALLEY WATER CONSERVATION DISTRICT RELATING TO PARCELS B&C OF THE LOCAL AGENCY FORMATION COMMISSION ANNEXATION NO. 2751.

as of the date first written above.

SAN BERNARDINO VALLEY WATER CONSERVATION DISTRICT

President

Secretary

APPROVED AS TO FORM:
RUTAN & TUCKER

By David B. Cosgrove
David Cosgrove
General Counsel, San Bernardino Valley Water Conservation District

CITY OF SAN BERNARDINO

Mayor Pro Tem
Edward V. Negrete

Attest:

City Clerk
Rachel Clark

APPROVED AS TO FORM:
AND LEGAL CONTENT:

JAMES F. PENMAN
City Attorney, City of San Bernardino

By James F. Penman

BOARD OF WATER COMMISSIONERS OF THE CITY OF SAN BERNARDINO

Margaret H. Chandler
President

APPROVED AS TO FORM
AND LEGAL CONTENT:
JAMES F. PENMAN, City Attorney
General Counsel, Board of Water Commissioners

By

Cheryl A. Flowers
Deputy City Clerk and Ex-Officio Secretary

AGREEMENT REGARDING ANNEXATION OF CITY OF RIVERSIDE TERRITORY TO SAN BERNARDINO VALLEY WATER CONSERVATION DISTRICT AND PAYMENT OF GROUNDWATER CHARGE

THIS AGREEMENT is entered into as of _____, 1993 by and between the SAN BERNARDINO VALLEY WATER CONSERVATION DISTRICT ("Conservation District"), a special district formed and operating under the Water Conservation District Law of 1931, as amended, California Water Code Sections 74000 et seq., and the CITY OF RIVERSIDE, a charter municipal corporation ("the City"), AGUA MANSA WATER COMPANY, a mutual water company ("Agua Mansa"), MEEKS & DALEY WATER COMPANY, a mutual water company ("Meeks & Daley"), RIVERSIDE HIGHLAND WATER COMPANY, a mutual water company ("Riverside Highland") and the WESTERN MUNICIPAL WATER DISTRICT OF RIVERSIDE COUNTY, a municipal water district formed and operating under the Municipal Water District Law of 1911, as amended, California Water Code Sections 71000 et seq. ("Western"). The City, Agua Mansa, Meeks & Daley and Riverside Highland are referred to in this Agreement collectively as "Producers." All of the above entities are referred to collectively in this Agreement as the "parties."

R E C I T A L S

A. For over eighty years, the Conservation District and its predecessor-in-interest have conducted groundwater replenishment activities for the purpose of conserving local water supplies

and increasing the supply of groundwater for the lands and residents within the boundaries of the District.

B. The Producers own various interests in real property situated adjacent to but outside of the boundaries of the Conservation District, but within the "sphere of influence" of the Conservation District. Such lands are hereinafter referred to as the "Subject Territory."

C. The Producers also own and operate various water producing facilities either within the Conservation District or within the sphere of influence of the Conservation District which produce groundwater from the groundwater basin which underlies the Conservation District and other lands.

D. Pursuant to the Municipal Water District Law of 1911, California Water Code Sections 71000 et seq., Western has the authority to oversee the water use of the Producers and has protected the rights of the Producers in prior litigation.

E. Pursuant to Government Code Section 56650, et seq. the Conservation District adopted Resolution No. 314 on January 14, 1993 making application to the Local Agency Formation Commission of the County of San Bernardino ("LAFCO") for the annexation of the land identified as Parcel A in Exhibit "A" which is within the District's sphere of influence and includes the Subject Territory.

F. On May 3, 1993, pursuant to Government Code Sections 56650 et seq. the Conservation District adopted Resolution No. 318, establishing a groundwater charge on the production of groundwater within the boundaries of the Conservation District, and making certain findings relevant thereto. Pursuant to Government Code

Sections 56650 et seq., the Conservation District may levy such groundwater charges on an annual basis.

G. Pursuant to Resolution No. 318, the Conservation District levied, assessed, and affixed a groundwater charge in the amount of $1.00 per acre foot for agricultural water and $4.00 per acre foot for non-agricultural water.

H. Pursuant to Resolution No. 318, the Conservation District found that the entire Conservation District constituted a single zone of benefit for the imposition of this charge and that the amounts charged were reasonably necessary for the replenishment, augmentation and protection of water supplies for all users within the Conservation District's boundaries.

I. Prior to the adoption of Resolution No. 318, the Producers protested to the Conservation District orally and/or in writing the levy of the groundwater charge. Among other things, the Producers expressed concerned about the particular uses of the money to be derived from the groundwater charge, increases in the groundwater charge which may be imposed by the Conservation District in the future, the relationship between the groundwater charge and the benefits to the Producers, and the relationship of the groundwater charge to the judgment issued by the Riverside Superior Court in Case No. 7842. Western, in its role as described in paragraph D above, shares these concerns.

J. Detailed discussions have been held between the parties regarding resolution of these concerns. At this time, the parties recognize that a long-term mutually satisfactory solution is not immediately forthcoming. Therefore, the parties have agreed

to the following terms with regard to Resolution No. 318 only. This Agreement is not intended to apply to future resolutions or actions adopted or taken by the Conservation District to levy subsequent groundwater charges.

NOW, THEREFORE, the parties agree as follows:

1. The Producers shall pay the groundwater charge as set forth in Resolution No. 318 of $1.00 per acre foot for agricultural water and $4.00 per acre foot for non-agricultural water.

2. The Conservation District shall withdraw the portion of its annexation application now pending before LAFCO as described in paragraph E above that relates to the land identified as Parcel A in Exhibit "A". The Conservation District agrees not to refile an application with LAFCO for annexation of the land identified in Exhibit "A" prior to November 1, 1994 and agrees further that completion of such annexation proceedings, as evidenced by LAFCO's execution of a certificate of completion, shall not occur prior to July 1, 1995. The Conservation District agrees that any groundwater charge which may be adopted by it in 1994 or 1995 will not apply to any land identified as Parcel A in Exhibit "A".

3. The parties agree to make a good-faith effort to establish a mutually satisfactory working relationship among themselves, to develop a strategy for the management of the groundwater within the Conservation District's jurisdiction, and any other actions as the parties so agree.

4. A committee shall be created to review information and provide input to the Conservation District regarding the use and implementation of the groundwater charge imposed by Resolution

No. 318 and any subsequent groundwater charges which may be imposed by the Conservation District. Any person or entity that extracts groundwater from within the District boundaries shall be eligible for membership on the committee.

5. This Agreement and the payment of the charges set forth in paragraph 1 above are in no way intended to waive the rights of any party to challenge any subsequent groundwater charge that may be levied by the Conservation District. The parties expressly reserve all rights to challenge any such subsequent groundwater charge.

6. No party shall be liable for any act or omission of any other party.

7. Any notice, instrument or other writing required to be given or delivered by this Agreement shall be given or delivered by personal delivery or by United States Mail, first class postage and addressed as follows (or to such other person or address as any party may direct to the other in writing):

If to Conservation District:
San Bernardino Valley Water Conservation District
101 East Redlands Boulevard
Suite 247
P.O. Box 1839
Redlands, CA 92373-0581

Attention: General Manager

If to City:
City of Riverside
Public Utilities Department
3900 Main Street
Riverside, CA 92552

Attention: Public Utilities Director

If to Agua Mansa:	Agua Mansa Water Company 31315 Cheney Street P.O. Box 3000 Lake Elsinore, CA 92531-3000 Attention: General Manager
If to Meeks & Daley:	Meeks & Daley Water Company 31315 Cheney Street P.O. Box 3000 Lake Elsinore, CA 92531-3000 Attention: General Manager
If to Riverside Highland:	Riverside Highland Water Company 1450 Washington Street Colton, CA 92423 Attention: General Manager
If to Western:	Western Municipal Water District of Riverside County P.O. Box 5286 Riverside, CA 92517-5286 Attention: General Manager

8. This Agreement represents the entire understanding of the parties as to those matters contained herein, and no prior oral or written understanding shall be of any force or effect with respect to those matters covered by this Agreement. This Agreement shall be governed by the laws of the State of California and construed as if drafted by all of the parties hereto. This Agreement may not be modified, altered or amended, except in writing, signed by all parties hereto.

Dated: 11-18-93

SAN BERNARDINO VALLEY WATER CONSERVATION DISTRICT

By: Stanley Berger
Title: Pres. dist

Approved as to form:

By: _____
Attorneys for
Conservation District

Dated: _____

Dated: _____

CITY OF RIVERSIDE

By: _____
Title: _____

Approved as to form:

By: _____
Attorney for City

Dated: _____

Dated: _____

RIVERSIDE HIGHLAND WATER COMPANY

By: _____
Title: _____ 11-18-93

Approved as to form:

By: _____
Attorney for
Riverside Highland

Dated: _____

Dated:_____

AGUA MANSA WATER COMPANY

By:_____
Title:_____

Approved as to form:

By:_____
Attorney for Agua Mansa

Dated:_____

Dated:_____

MEEKS & DALEY WATER COMPANY

By:_____
Title:_____

Approved as to form:

By:_____
Attorneys for
Meeks & Daley

Dated:_____

Dated:_____

WESTERN MUNICIPAL WATER DISTRICT OF RIVERSIDE COUNTY

By: Donald Schroeder
Title: President

Approved as to form:

By: Ann T Thomas
Attorney for Western

Dated: Nov 17, 1993

CITY OF Riverside PUBLIC UTILITIES DEPARTMENT 3900 Main Street . Riverside, California . 92522

BILL D. CARNAHAN
Public Utilities Director

RECEIVED
JUN 17 1993
LAFCO
San Bernardino County

June 14, 1993

Cecilia Lopez-Hernandez, LAFCO Analyst
San Bernardino County LAFCO
175 West Fifth Street
San Bernardino, CA 92415-0490

Dear Ms. Lopez-Hernandez:

Subject: SAN BERNARDINO LAFCO FILE NO. 2751, SAN BERNARDINO VALLEY WATER CONSERVATION DISTRICT ANNEXATION NO. 2

The San Bernardino Valley Water Conservation District (SBVWCD) has existed for over 60 years. During this period the sole function of SBVWCD has been to operate spreading basins to percolate (recharge) storm flows into the Bunker Hill Basin. This Basin generally overlies the Cities of Redlands, Highland, Loma Linda, and San Bernardino. During all this time it has operated without imposing a pump tax. Recently, however, SBVWCD undertook proceedings to levy a groundwater extraction charge (pump tax) on all wells within its boundaries. This includes approximately 20 wells of the City of Riverside. The statute requires the preparation of an engineering report in order to support any such charge. This report was prepared by Geoscience although none of the agencies that will be affected by the groundwater charge were requested to provide detailed input that could have been used in the preparation of the engineering report.

On May 5, 1993, the SBVWCD adopted Resolution No. 318 which includes a groundwater levy on all water extracted within the SBVWCD. This pump tax was adopted over the objections of the water exporters who are the plaintiffs of the 1969 Court Judgement in the case of Western Municipal Water District v. East San Bernardino County Water District, Case No. 78426, Riverside Superior Court. In that Judgement the rights of the City of Riverside, among others, to pump water from the Bunker Hill Basin were determined, reduced to the safe yield of the Basin, and fixed. Riverside cannot pump in excess of its rights under the Judgement, does not contribute to any overdraft in the Basin, and cannot benefit from additional recharge by the SBVWCD. This pump tax could have a significant financial impact on the water consumers of Riverside, even though the City will not benefit to any measurable extent from the SBVWCD pump tax.

At the present time, the City of Riverside is reviewing its options, including legal remedies, in regard to the SBVWCD groundwater charge. Attached is a list of legal and technical issues Riverside intends to address in challenging the SBVWCD groundwater charge.

Now the SBVWCD seeks to expand its boundaries to cover its entire zone of influence by annexing additional territory. The proposed annexation would include approximately 25 additional wells of the City of Riverside, and thus subject the City to the threat of further pump taxes without commensurate benefit.

The City of Riverside objects to the proposed annexation, and at a minimum requests that LAFCO delay any action regarding Area "A" for six months to allow time to try to sort out the legal and equitable issues involved. The two areas, Area "A" and Areas "B and C," have entirely different population and land use characteristics, have different groundwater characteristics, and are utilized by different water agencies. Separating the two areas for purpose of this annexation proceeding should pose no special problems.

The matter included in the attached statement, though addressed to the present pump tax effort, apply equally to the proposed annexation.

Sincerely,

Dieter P. Wirtzfeld

for Bill D. Carnahan
Public Utilities Director

BDC/DVG/alp

cc: Dieter P. Wirtzfeld
David V. Garcia
Edward L. Kostjal

ANNEX-LAFCO.LTR

LEGAL AND TECHNICAL ISSUES CHALLENGING THE SAN BERNARDINO VALLEY WATER CONSERVATION DISTRICT (SBVWCD) GROUND WATER CHARGE

In reference to the attached SBVWCD's Resolution #318 and *Part 9 - Ground Water Charge, Chapters 1, 2, and 3* (Division 21) of the Water Code, the ground water charge is not justified because the Board of SBVWCD did not comply with the requirements of the water code for adopting the ground water charge. In addition, the Board determined that the entire Bunker Hill ground water basin constitutes a single zone of benefit even though the engineering report identified eight sub-basins with unique responses. If it is determined that the proposed ground water charge is legal, then it is only equitable that the charge be based on the zones of benefits. SBVWCD also failed to comply with the California Environmental Act (CEQA) prior to implementing the groundwater charge.

A. The SBVWCD did not comply with the Water Code as follows:

1. The groundwater charge will not protect public health and safety as claimed by SBVWCD in paragraph 2 of its Resolution No. 318 and as required by the Water Code. In enacting the legislation allowing water conservation districts to impose groundwater charges in certain limited situations, the Legislature provided that such groundwater charges must be in "furtherance of district activities in the protection and augmentation of water supplies for users, which are necessary for the public health, welfare and safety". (Wat. Code § 75521. To the contrary, the proposed SBVWCD's ground water recharge activities may adversely affect the public health, welfare and safety of those that work or live within the "Pressure Zone" in the San Bernardino area. This is because the proposed recharging activities may cause ground water levels in the pressure zone to rise to a level that may result in liquefaction during a major earthquake. In addition, ground water level increases in the pressure zone may result in increase concentrations of contamination in drinking water supplies from wells within the pressure zone. This is because contaminants normally are found closer to ground surface.

2. The proposed need for ground water recharge was based on water conditions of the entire Bunker Hill basin, rather than "water supplies of the district" as required by Section 75561(c) of the Water Code. Whereas, the SBVWCD only covers about half of the Bunker Hill basin, the district based its estimates of annual overdraft on the entire basin rather than ground water supplies within the district as required under Section 75506 . The district can only levy a ground water charge for the replenishment of ground water within the district (Section 75561e).

   The legally required engineering report that was prepared by Geoscience determined accumulated overdraft and annual overdraft for the entire Bunker Hill Basin, and did not estimate the corresponding overdrafts within the SBVWCD. The SBVWCD Board misstated this fact as part of its resolution. Paragraph 4 of Resolution #318 states "WHEREAS, at the regular meeting of the Board of directors on March 1, 1993, the SBVWCD accepted an engineer's investigation and report, prepared by GEOSCIENCE Support Services Incorporated, relating to ground water conditions in the Bunker Hill basin underlying the District boundaries."

3. Section 75522 states "The ground water charges are authorized to be levied upon the production of ground water from all water producing facilities, whether public or private, within the district or a zone or zones thereof for the benefit of all who rely directly or indirectly upon the ground water supplies of the district or a zone or zones thereof". The Geoscience engineering report contains no evidence that it benefits all water users within the SBVWCD for the SBVWCD to recharge the basin. The recharge may adversely impact Riverside's, or other municipal, wells in the event ground water levels rise into layers where contaminants are present.

4. Section 75505 defines "accumulated overdraft" "which means the amount of water necessary to be replaced in the intake areas of the ground water basins within the SBVWCD or any zone or zones thereof to prevent the landward movements of salt water into the fresh ground water body, or to prevent subsidence of the land within the district or any zone or zones thereof as determined by the board from time to time". It seems that the major intent of the Water Code (Ground Water Charge) was to prevent sea water intrusion or land subsidence. However, Resolution No. 318, Section 1D states "The accumulated overdraft as of the last day of the preceding water year is zero." It appears the SBVWCD has inappropriately levied the ground water charge since there is no need for surface distribution (artificial recharge) to prevent land subsidence nor prevent sea water intrusion (or ground water degradation). To the contrary, the proposed recharge may result in degradation of downstream ground water quality.

5. The SBVWCD's engineering report is in error, when used to determine the safe yield of the basin. Section 1J of the Resolution states "The water necessary for surface distribution in the District is 30,000 acre-feet". The Water Code requires this "Finding and determination" to be "for the ensuing water year" (Wat. Code § 75547). We believe the estimated surface distribution requirement of 30,000 acre-feet is in error because the basis for the amount is Figure 28 of the engineering report prepared by Geoscience which shows that the minimum annual average basin-wide precipitation of 25 inches would be necessary to support ground water production at the legally established "Safe Yield" of the basin. The court has determined the natural safe yield of Bunker Hill basin as 232,000 A.F., i.e, the amount of ground water which could be derived solely from natural precipitation in the absence of imported water and the return flows therefrom, and without contributions from new conservation. The average annual precipitation in the basin is 18 inches (Geoscience: San Bernardino Valley Water Conservation District, Engr. Report, Vol 1, page 14, March 1993), which is less than the 25 inches determined in the engineering report to support the safe yield.

B. The ground water charge does not benefit the area to be assessed as required by law

1. Courts have required a close nexus between the imposition of a charge such as that imposed by SBVWCD and the benefits to be received as a result of the charge. In addition, Water Code Section 7522 provides that the groundwater charges must benefit all who rely on the groundwater supplies of the district. The groundwater charge imposed by SBVWCD does not benefit the City of Riverside for the following reasons:

2. Section 75540 states "Prior to the establishment of any ground water charge, the board

shall establish a zone or zones within the district within which the ground water charge will be effective. Such zone or zones shall be established and may be amended to the extent and in the manner prescribed in Chapter 3 (commencing with Section 75560) of this part. A zone may include the entire district". The SBVWCD determined that the Bunker Hill Basin "acts as unit", and therefore determined one zone for the entire SBVWCD. However, the Geoscience report showed that Bunker Hill ground water basin consists of eight distinct sub-basins that will not react similarly to recharge and production of water. The SBVWCD should have designated each sub-basin, within the SBVWCD, as a zone of benefit for the purpose of determining, the equitable ground water charge within each zone.

3. The wells that are closest to the SBVWCD's percolation basins will benefit the most from the proposed and previous recharge of the basin. The wells farthest from the SBVWCD's percolation basins and in the pressure zone have historically received insignificant benefits from the SBVWCD's recharge activities. This is mainly because of the hydrogeology (mainly barriers to ground water flow) of the Bunker Hill Basin and the miles of distance between the pressure zone and the SBVWCD's percolation basins.

   Ground water levels in the Redlands area were approximately 280 feet below ground surface during 1992. This was determined using information from the engineering report prepared for the SBVWCD by Geoscience. In the pressure zone area water levels were approximately 40 feet below the ground surface during 1992. Ground water recharge by the SBVWCD, significantly increase water levels in the Redlands area, whereas in the pressure zone the increase is insignificant.

   The relationship between water levels and pumping costs is directly related because the higher the lift, the higher the energy cost. It costs approximately $13.50 per acre-foot of water lifted every 100 feet. Therefore, if water levels in the pressure zone were only raised approximately 5 feet, the energy cost savings per acre-foot would be $0.68 per acre-foot, whereas in the Redlands area if water levels increase the 100 feet the energy savings would be $13.50 per acre-foot of water pump from wells.

4. Rather than benefitting the City as required by law, the groundwater charge could actually harm the City's wells.

   Recharge activities by the SBVWCD may accelerate the migration of the Redlands contaminant plume. The plume contains TCE & DBCP contaminants. The result of the accelerated migration of the plume will be that Riverside wells may become contaminated much sooner than if migration of the plume were not affected by recharge activities of the SBVWCD.

5. SBVWCD is proposing to waste public funds by duplicating efforts of others. Since others are undertaking these efforts, no particular benefit is achieved by the imposition of SBVCD's groundwater charge. Section 2 of the Resolution states that "the District is undertaking programs for comprehensive management of the entire basin within its jurisdiction". There is no need for the SBVWCD to take on this responsibility because the San Bernardino Valley Municipal Water District (SBVMWD) has already taken the

leadership role. The SBVMWD has already contracted with the United States Geological Survey and CDM Engineering Consultants to develop a comprehensive basin management and master plan for the entire Bunker Hill basin. SBVWCD already participates through its membership on the Committee reviewing the proposed basinwide masterplan. The contract includes the development of a computer-based Geographic Information Systems (GIS) to monitor basin conditions and water quality. In addition, the EPA, regional Water Quality Control Board and other state and federal agencies may exercise their authority over many of the programs SBVWCD proposes to fund by its groundwater charge.

6. SBVWCD failed to recognize that the City of Riverside's production from the Bunker Hill basin is limited by the court's judgement in Western Municipal Water District v. East San Bernardino County Water District (Case No. 78426). In that judgement, the rights of the City and others were reduced to the safe yield of the basin and limited to a fixed amount. The City of Riverside cannot pump in excess of its rights under this judgement, does not contribute to any overdraft in the basin and therefore, cannot benefit from additional recahrge by SBVWCD. Therefore, the groundwater charge could have a significant financial impact on the water consumers of Riverside, even though the City will not benefit to any measurable extent form the groundwater charge.

C. The purpose of the Groundwater Charge is beyond SBVWCD's statutory powers.

1. Section 75596 of the Water Code provides that groundwater charges must be in addition to any general tax or assessment levied within the district. Funds raised by any groundwater charge cannot produce funds for district purposes that would exceed the amount deemed necessary to be used in the "replenishment, augmentation and protection of water supplies for users within the district."

   As noted above SBVWCD proposes to use the funds received from the groundwater charge for activities already undertaken by other agencies. Therefore, it is unclear how this amount is "necessary" for the "replenishment, augmentation and protection" of the water supplies of SBVWCD as required by the Water Code. Moreover, SBVWCD claims that it will use the funds from the groundwater charge for various activities, without supporting how these activities fall within SBVWCD's statutory purpose of "replenishment, augmentation and protection of water supplies." (see also § 75523 providing that proceeds from groundwater charges must be "exclusively" for district purposes.)

D. SBVWCD did not comply with the California Environmental Quality Act (CEQA)

1. The SBVWCD's resolution states that "the ground water charge adopted herein is statutorily exempt from CEQA under Title 14, California Code of Regulations Section 15273." However, previous replenishment by the SBVWCD resulted in environmental damage (flooding of basements in pressure zone).

2. "Moreover, Section 15723 exempts the establishment of rates or fares for the purpose of 'meeting operating expenses, including employee wage rates and fringe benefits, or

for purchasing or leasing supplies, equipment or material.' Section 15273 (c) provides that the public agency must incorporate 'written findings' in its record in which an exemption under this section is claimed setting forth with 'specificity' the basis for the claim of exemption. SBVWCD has failed to do this. Rather, in its resolution, SBVWCD states merely that the charge will be used for meeting operating expenses and purchasing or leasing equipment and materials. It appears that the groundwater charge will be used for purpose beyond these since in the Resolution, SBVWCD claims that it will use the funds for basin cleaning, water quality sampling and various basin studies. Therefore, the use of this exemption is improper.

3. SBVWCD claimed that its actions were exempt under two other sections of CEQA: State CEQA Guidelines Section 15301 (maintenance of exisiting public faicilities) and State CEQA Guildlines Section 15306 (information collection). These exemptions are also inapplicable. Section 15301 exempts very limited activities involving negligible or no expansion of use beyond previous existing uses. Section 15301 limits information collection to activities which "do not result in a serious or major disturbance to an environmental resources". Both of these exemptions are limited in that they cannot be used if the cumulative impact of successive projects of the same type over time is significant or if there is a reasonable possibility that the activity will have a significant effect on the environment due to "unusual circumstances." (State CEQA Guidelines § 15300.2.) The information collection exemption is further qualified in that it is inapplicable when used in a particularly sensitive environment. (§ 15300.2(a).)

   As discussed above, recharge may adversely impact the City's or other municipalities' wells if groundwater levels raise into layers where contaminates are present. Because there is a possibility of significant effect in this instance and because SBVWCD has failed to specify how these exemptions apply, SBVWCD has failed to properly comply with CEQA. Further environmental evaluation should have been conducted prior to adopting the groundwater charge."

DVG/ZP/BABS/mes
sbvwcd2.693

LAW OFFICES
AKLUFI AND WYSOCKI

JOSEPH S. AKLUFI
DAVID L. WYSOCKI

3403 TENTH STREET, SUITE 610
RIVERSIDE, CALIFORNIA 92501
AREA CODE 714
TELEPHONE 682-5480
TELECOPIER 682-2619

June 15, 1993

Ms. Cecelia Lopez-Hernandez
LAFCO Analyst
San Bernardino County LAFCO
175 West Fifth Street
San Bernardino, CA 92415-0490

VIA TELECOPIER AND MAIL
909-387-5871

Re: San Bernardino LAFCO File No. 2751, San Bernardino Valley Water Conservation District Annexation No. 2

Dear Ms. Lopez-Hernandez:

For years now, we have had the honor and pleasure of representing, as their general legal counsel, two time-honored water purveyors in the Temescal Valley:

The Meeks and Daley Water Company
The Agua Mansa Water Company

Our clients have owned, for many, many years, judicially-recognized water rights in the San Bernardino Valley.

On June 13, 1993, we learned that the San Bernardino Valley Water Conservation District proposes to annex territory that includes water wells owned and operated by our clients. The purpose of this letter is to convey our clients' unconditional protest to the annexation proceeding.

You should know that, without notice to us, the Water Conservation District adopted, on May 5, 1993, a resolution to tax our clients' pumping rights, which have been established by a court of law. There is no legal basis for the tax, and we have been authorized to pursue legal action to stop it as against our clients. Because our clients' water rights have been established by court order, the Water Conservation District's pump tax is illegal, as a matter of law.

The proposed annexation is merely another component of the Water Conservation District's strategy to develop alternate sources of revenue to support its operations out of fear of its loss of ad valorum property taxes, a fact that the District admits.

We have reviewed the protest letter addressed to you by the City of Riverside, and we concur with, and join in, the City's protest, because the City's factual and legal position is virtually identical to that of our clients'. Therefore, please be advised that we hereby adopt, by this reference, the City of Riverside's objection, and the grounds therefor, as if they were our clients' own. Our clients also join in (and supplement) the City's minimum request that LAFCO delay <u>any</u> action until the legal issues presented by the Water Conservation District's "pump tax" and annexation application have been resolved.

Finally, we wish to note that we are aware that the fact that merely adopting the City of Riverside's opposition as our own may be interpreted as "lukewarm" opposition. However, we do this only because we just recently learned of the annexation proposal and little time remains to register our own, detailed, objection. Thus, out of necessity, we take this abbreviated approach to register our clients' protest. If we had had the time, our protest to the entire annexation application would have been original and in great detail.

Very truly yours,

AKLUFI AND WYSOCKI

Joseph S. Aklufi

JOSEPH S. AKLUFI

JSA:dvh

cc: Meeks and Daley Water Company
Agua Mansa Water Company

Survey Response Provided by the District Including the Appendix Materials Identified in the Staff Report

Attachment 4

San Bernardino Valley Water Conservation District

Municipal Service Review (2003)

SBV WATER CONSERVATION DISTRICT

OUR NAME IS OUR MISSION

Table of Contents

List of Appendices

San Bernardino Valley Water Conservation District - Municipal Service Review (2003)

1.0 Introduction

1.1. Background of Review[1]

On September 26, 2000, Governor Gray Davis signed into law AB 2838 (Chapter 761, Statutes of 2000), authored by Assembly Speaker Robert M. Hertzberg. This legislation, titled the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 ("CKH Act") and codified as California Government Code §56000 et seq, marked the most significant reform to local government reorganization law since the 1963 statute that created Local Agency Formation Commissions (LAFCOs) in each county.

Development of the legislation resulted from the recommendations of the Commission on Local Governance for the 21st Century. The Commission, established through statute in 1997, published its recommendations in a final report, Growth Within Bounds, issued on January 20, 2000.

Prior to the 2000 amendments, the law already permitted LAFCOs to conduct municipal service review studies. These LAFCO service studies generally provided evaluation tools to support future LAFCO actions or were part of a reorganization committee effort.

Existing law (§56430) now states that in order to prepare and update a Sphere of Influence (SOI), LAFCOs are required to first conduct a municipal service review of the municipal services provided in the county or other appropriate designated area. The term "municipal services" generally refers to the full range of services that a public agency provides or is authorized to provide.

The LAFCO for San Bernardino County chose to divide the county into five geographic areas, reviewing one area per year, to meet this requirement. In 2002 the western valley Municipal Services Reviews were completed, with 2003 being designated for the eastern valley reviews.

1.2. History of the San Bernardino Valley Water Conservation District

In 1931, local citizens voted to create the San Bernardino Valley Water Conservation District ("District") as a public agency, under the Water Conservation Act of 1931, to protect against excessive export of the local surface water by downstream agencies. The Water Conservation Act of 1931 provided broad authority to exercise a variety of powers necessary to further the District's primary goal of conserving water, such as making contracts, acquiring property through eminent domain, owning and operating recreational facilities, owning and operating hydroelectric plants, and intervening in the actions of

[1] This section was largely incorporated from "LAFCO MUNICIPAL SERVICE REVIEW GUIDELINES FINAL DRAFT 2002," Governor's Office of Planning and Research, October 3, 2002.

other agencies when those actions interfere with the natural flow of streams that would otherwise be conserved for beneficial use.

The District has historically operated water recharge facilities in two areas: the Santa Ana River ("SAR") and Mill Creek ("Mill Ck"). In 1935 East Lugonia Mutual Water Company transferred to the District its jurisdiction for conserving water from Mill Creek. A similar transfer occurred when the property and duties of the Water Conservation Association – primarily concerned with the Santa Ana River – were deeded over to the District.

The amount of water recharged by the District depends on the amount of rain and snow in the mountains. Over the period of its history the District has recharged the groundwater in any given month, and has put as much as 104,000 acre-feet of native (local) water into the groundwater basin in a single year. In addition to conservation of native water, the District has recharged imported water at the request of its constituents.

1.3. Current Mission

"The mission of the San Bernardino Valley Water Conservation District is to ensure recharge of the Bunker Hill Groundwater Basin in an environmentally and economically responsible way, using local native surface water to the maximum extent practicable.

We strive to improve the supply and quality of groundwater, balancing such demands with those of land, mineral, and biological resources."

1.4. District Activities

The District is often considered a neutral third-party as it relates to water, based on its unique position as neither water wholesaler nor retailer, and given responsibilities due to that role. In addition, its significant holdings of undeveloped land bring the District to the forefront of environmental issues. The actual activities undertaken by the District, to enact and support its mission, are quite broad. The services provided by the District assure high quality local water supplies for people and the environment in the San Bernardino Valley. Some key activities performed by the District are described below.

Groundwater Recharge

The weather in the Valley brings a wide range of precipitation. The District captures surface water from the Santa Ana River or Mill Ck in the wet years and channels the water to a series of small basins where the water percolates into the ground. Water is stored in this groundwater basin – the Bunker Hill Basin – until needed; when there is demand for the water it is pumped out by local water agencies and citizens and put to use. By keeping groundwater levels reasonably high, the District helps reduce the cost to local producers of pumping groundwater.

The subsurface of the Bunker Hill Basin slopes from east downward to the west. Water migrates naturally with that slope. A natural ground fault, called the San Jacinto Fault,

forms a barrier to groundwater movement, causing water to pool and rise toward the surface in the lower (west) end of the basin. As a result, groundwater tends to rise toward the ground surface in that area, which may increase the risk from liquefaction.

The native surface waters of the Santa Ana River and Mill Creek are some of the best quality water in the State of California. The District captures unused surface water and diverts it into spreading basins for percolation into the groundwater basin. Through this recharge, the high quality surface water blends with and improves the existing groundwater. Such use of native water provides a much better replenishment source than imported water. Annual analyses of the principle contaminants of total dissolved solids and total inorganic nitrogen reveal that the groundwater quality is better where the surface water has percolated into the ground. Another benefit of improving the groundwater supply is the reduced cost to local agencies for treatment of wastewater.

High Groundwater Mitigation Project

According to the U.S. Geological Survey, the "Pressure Zone" area of the Bunker Hill Basin, near the San Jacinto fault, was a shallow marshland throughout much of history. In the 1870s, many wells near present-day downtown San Bernardino had water at or above the ground surface. The historic pattern of high groundwater levels changed in the 1930s, when farming and groundwater pumping increased during a time of diminished local rainfall, as groundwater levels dropped.

In the 1960s, the pattern of water use changed again. Decreased groundwater pumping and decreased evaporative loss from agricultural plants occurred at the same time that import of water from outside the basin increased. This pattern continued through the decades of the 1970s and 1980s.

By the early 1980s the water level in the historic marsh area had risen to near, or above, the surface. These high water levels led to a number of problems including buckling streets, flooded basements, and damage to concrete-lined flood control channels. As groundwater levels rose, so too did the potential for soil liquefaction during a seismic event in the downtown area of San Bernardino.

The District is currently participating in a program which addresses managing the high groundwater levels in the pressure zone by increasing well pumping capacity using existing pumps, canals, and pipelines to deliver water to downstream users. Plans are being formulated to construct additional extraction monitoring wells to better manage the high groundwater area.

Assure Beneficial Use of Water Resources

The District serves a role of "honest broker" among ten public and private water agencies, which formed the Santa Ana River-Mill Creek Cooperative Water Project ("Exchange Plan") to facilitate transfers and exchanges of water amongst the members. Because the District is neither a wholesaler nor retailer of water, it was deemed the most objective and

was selected to manage the program and the water transfers. The District has performed that role continuously since 1976.

Big Bear Watermaster

The District is one of three court-appointed members of the Big Bear Watermaster. The Watermaster accounts for the flows of water in and out of Big Bear Lake. The District's role within the Watermaster is to ensure that flows that should or would contribute to the groundwater basin are not lost or improperly used by others.

Promote Proper Uses of Natural Resources

The District has supported mineral extraction from its lands for more than 60 years. These deposits of sand and gravel are designated by the State Department of Resources as "regionally significant," obligating local agencies to protect the viability of these deposits. The mining industry provides 2-4 million tons of aggregate annually for road construction and other masonry products. Using a standard economic multiplier factor, the mining industry is estimated to pump $50 million into the local economy each year.

Protect the Environment

District lands are home to several natural plant and animal habitats, including those for sensitive, threatened, or endangered species. The District is forming partnerships with the U.S. Bureau of Land Management, the U.S. Fish and Wildlife Service, and California Department of Fish and Game to ensure that water conservation practices are compatible with effective wildlife habitat management. To ensure that compatibility, the District is spearheading development of the Upper Santa Ana River Wash Land Management and Habitat Conservation Plan.

Upper Santa Ana River Wash Land Management and Habitat Conservation Plan

In 1993, representatives of numerous agencies - including water, mining, flood control, wildlife, and municipal interests - formed a Wash Committee to address land use planning issues local to the upper Santa Ana River wash area. The role of the Committee was subsequently expanded into the Task Force, and it began meeting to determine how this area might accommodate all of the important functions represented by the participating agencies.

The Task Force elected to disregard land ownership lines in favor of a "best use" strategy for land use planning. It is anticipated, for example, that significantly disturbed areas are more favorable for mining while undisturbed lands are more favorable for preservation. This project is expected to produce a Land Management and Habitat Conservation Plan for the wash planning area, comprised of approximately 5000 acres spanning from the mouth of the Santa Ana River canyon to Alabama Street in the Santa Ana River wash.

Drinking Water Source Assessment

The U.S. Environmental Protection Agency has mandated that the sources of drinking water be assessed for vulnerability to contamination. The Drinking Water and

Environmental Management Division of the California Department of Health Services ("DHS") is the lead agency for developing and implementing the Drinking Water Source Assessment Program in California.

DHS has allowed individual agencies that deliver water to customers for potable use to perform their own vulnerability assessment. The District, in association with the Upper Santa Ana Water Resources Association, has contracted with several of the participating agencies to perform this vulnerability assessment on those agencies' wells at a cost significantly reduced over that quoted by various consultants. The District has conducted source water assessments on approximately 300 wells, and continues to provide these assessments as needed.

1.5. District Facilities

Historically, the Upper Santa Ana River Wash was a natural floodplain and alluvial fan. Due to geological conditions of this area, it has been traditionally used for percolation basins for groundwater recharge, which provides a significant part of the water supply for the local region.

The District (including its predecessors the Water Conservation Association in the Santa Ana River and East Lugonia Mutual Water Company in Mill Creek) has developed facilities in, and diverted water from, Santa Ana River and Mill Creek for more than 90 years. The majority of the canals and percolation basins used were constructed in the 1930s.

The canal system was dug, often by hand, to conform to the natural topography. The canals were dug by displacing native material and creating a ditch-type canal lined with native rock. This remains a very cost effective way to move water for groundwater recharge. Little maintenance of the canals is required, beyond weed abatement and sediment removal. Reinforced concrete structures were constructed in the canals with gates to divert flows into the percolation basins.

Percolation basins were dug in a similar manner as the canals. The native material was displaced to create a levee, allowing diverted water to flow in and accumulate. Small concrete structures with gates were constructed to regulate flows between basins. As a result, maintenance is minimal, with most efforts focused on weed abatement and sediment removal. Today, the canals, percolation basins, and concrete structures and gates are in good condition and, as mentioned above, require minimal annual maintenance.

The District owns and operates two diversion structures, one on Santa Ana River and one on Mill Creek. The diversion structure on Santa Ana River was constructed in the early 1930s just upstream of a weir in the river channel. The District diverts water from the Santa Ana River using this diversion facility in the Santa Ana Canyon. This structure has

a design capacity of 1,000 cubic feet per second ("cfs"). Additional water can be diverted using other local agencies' infrastructure. The diverted water is conveyed under Greenspot Road to the Parshall Flume for measurement, and then to the SAR recharge area for percolation, via the District's Main SAR Canal.

The Main SAR Canal is bifurcated shortly after the Parshall Flume (a gauging station) into the North Canal and South Canals. The North Canal carries water into percolation basins, where the water is spread for percolation. The South Canal carries water into the U.S. Army Corps of Engineers ("Corps") Seven Oaks Dam ("SOD") Borrow Site, where the water is spread for percolation in three reconstructed percolation basins inside the Borrow Site, and at the west end of the Borrow Site itself. The SAR recharge area contains sixteen percolation basins, with a wetted area of approximately 132 acres.

The Mill Ck recharge area lies south of Mill Ck just upstream of its confluence with the Santa Ana River. The Corps reconstructed the District's Mill Ck diversion structure in the 1980s as part of a flood protection project for the Santa Ana River Main Stem, from the mountains to the ocean. This facility is rated at 90cfs. Additionally, SAR water can be conveyed using several different routes to the District's Mill Ck recharge area.

The main canal from the Mill Ck diversion is split into a north and a south canal to provide maximum flexibility and redundancy for moving water. These two canals convey the diverted water to the Mill Ck recharge area located south of the flood control levee south of the river channel. Fifty-eight percolation basins in the Mill Ck recharge area have a total wetted area of approximately 66 acres.

2.0 Sphere of Influence (expected changes)

While no changes to its sphere of influence are anticipated at this time, the District does expect to annex in the near future those areas currently within its sphere of influence.

3.0 Service Review Issues

3.1. Infrastructure Needs/Deficiencies

3.1.1. Capital Improvement Plans/Studies

The District plans to reconstruct percolation basins in the Borrow Site to replace those basins whose operation was interrupted during the construction of Seven Oaks Dam. The wetted area of these basins will be approximately 145 acres.

The District will also construct percolation basins, and ancillary facilities, as part of the Upper Santa Ana River Wash Land Management and Habitat Conservation Plan. Seven basins of varying size, with a total wetted area of 45 acres, are anticipated under this plan.

3.1.2. Master Service Plans/Studies

The District is one of many entities that have been working together to manage groundwater in the Bunker Hill basin. Groundwater management is a

collaborative effort, and this effort is achieved through various agreements and judgments. Entities involved in this effort include:

- San Bernardino Valley Water Conservation District
- Upper Santa Ana Water Resources Association
- San Bernardino Valley Municipal Water District
- East Valley Water District
- Western Municipal Water District
- West San Bernardino County Water District
- Yucaipa Valley Water District
- Bear Valley Mutual Water Company
- Riverside Highland Water Company
- Elsinore Valley Municipal Water District
- Colton, Loma Linda, Redlands, Rialto, Riverside, and San Bernardino.

A significant challenge to water managers in the San Bernardino Valley is the balance of water levels. The District, in cooperation with other agencies in the basin, is working to balance the need for higher groundwater levels in the east and lower groundwater levels in the west. This is achieved through recharge in the east and pumping in the west. However, the situation is complicated by the fact that major water producers in the westerly part of the basin don't want water levels to drop too low – an event currently taking place causing the City of San Bernardino and other agencies to purchase state water for recharge.

This balancing act requires not only a high degree of inter-agency coordination, but also a thorough understanding of the interaction between groundwater recharge, groundwater levels, subsurface flow, subsurface and storage parameters. This understanding is based on hydrogeologic information and evaluation of monitoring well data from throughout the basin. The Santa Ana Watershed Project Authority is currently installing ten monitoring wells in the west end of the Bunker Hill basin using California Proposition 13 (2000 Water Bond) funds. Additionally, the District has won an individual grant to install two monitoring wells in the forebay (east) area of the valley. A groundwater model is currently being developed by the United States Geological Survey (USGS) for the San Bernardino area. The model will give the local agencies another important tool for groundwater management. Installation and monitoring of new monitoring wells in the Santa Ana River forebay will provide water quality information that will help support refinement of this model.

Two Watermasters serve the Bunker Hill Basin. The Western-San Bernardino Watermaster, created in 1969 (Case No. 78426), prepares annual reports on groundwater extractions in the Bunker Hill and the downstream Riverside and Colton groundwater basins. The Big Bear Watermaster, established in 1977 (Case No. 165493), prepares annual reports which keep account of Big Bear Lake

hydrologic conditions, and conditions downstream of the lake in Bear Creek and Santa Ana River. The District sits on the Big Bear Watermaster.

These basin adjudications provide the basic operating framework for basin management in this area. The District's specific roles in the existing groundwater management are documented in its *Operational Management Manual* (1994) which presents goals, objectives, and policies related to groundwater management and provides guidelines for recharge operational procedures. A copy of the *Operational Management Manual* is attached as Appendix A. This manual is being updated as the District's *Program for Effective Recharge Coordination*, and is due out early next year.

The District documents its groundwater management efforts, and the hydrologic conditions of the Bunker Hill basin, in its annual engineering investigation report. A copy of the *Engineering Investigation of the Bunker Hill Basin 2001-2002* is attached as Appendix B. These annual reports present groundwater contour maps, well hydrographs, changes in storage, groundwater production, estimations of groundwater recharge needed to replenish supplies in the coming year, and surface water and groundwater quality. These annual reports have been produced since 1993.

These two District documents provide important feedback to local water managers and thereby help coordinate and guide groundwater management in the Bunker Hill basin. In preparing the annual report, the District compiles, organizes, and analyzes production and water level information from numerous agencies. This annual report also includes a summary of water quality conditions, recognizing that impairment of water quality results in diminishment of usable water supply and a decline in water supply reliability.

3.1.3. Water Supply Service Plans/Studies

The District does not provide direct delivery of water. The water that the District recharges in the Bunker Hill groundwater basin is made available to all groundwater producers in the basin.

3.1.4. Sewer Service Plans/Studies

The District does not provide sewer service.

3.1.5. Age and Condition of Facilities

As mentioned in Section 1.5, the many of the District's facilities were constructed in the 1930s. Almost without exception the District's structures have been well maintained, and are in fine operating condition.

3.1.6. Capacity Analysis

The District has undergone an analysis and inventory of diversion structures, gates, canals, and percolation basins in its Santa Ana River and Mill Creek recharge areas. The results of this analysis indicate the District owns and maintains 75 percolation basins, with a total wetted area of approximately 198 acres, and surface storage capacity of approximately 2,000 acre-feet.

3.1.7. Future Development

Groundwater Conservation and Habitat Restoration

The District, in cooperation with the Corps, has begun a Section 1135 environmental restoration project in the Seven Oaks Dam Borrow Site.

Before the construction of the dam began, the Borrow Site was the site of several percolation basins used by the District for groundwater recharge. The use of the project site as a Borrow Site for the construction of the dam essentially eliminated all the vegetation, wildlife habitat, and groundwater recharge function that originally occurred at the site.

Three percolation basins have been reconstructed at the east end of the Borrow Site. The remainder of the Borrow Site, which consists of a relatively even-sloped bottom of coarse sand, and a few piles of very large granite boulders, is almost entirely devoid of vegetation. The proposed Section 1135 project would restore a series of percolation basins that are optimized to support the native vegetation and wildlife that are characteristic of the surrounding areas and were present at the project site prior to use of the area as a Borrow Site.

The estimated project cost is $5,639,000 with expected funding of $5,000,000 from the Corps and the remainder funded by the District. This project is scheduled for completion in the summer of 2005. The draft Preliminary Restoration Plan associated with this project is attached as Appendix C.

Groundwater Monitoring

The District has been awarded an AB303 grant from the California Department of Water Resources to support the installation of two 400-foot deep groundwater monitoring wells in the Santa Ana River and Mill Creek forebays. The grant awarded is in the amount of $230,000. The planning and design phase will begin by the end of this year. Information about this grant award is attached as Appendix D.

The construction of these wells will aid in understanding the local groundwater hydrogeology, and provides improved monitoring data important for enhanced recharge by the District. Water level data will be collected at the time of well installation, and on a continuing basis as part of the groundwater monitoring program conducted by the District. These data will fill important gaps in the

current groundwater monitoring network, and will assist in understanding the effects of recharge on groundwater levels. This information will be shared with all the stakeholders in the basin, and will assist the District in managing its limited water resources.

Upper Santa Ana River Wash Land Management and Habitat Conservation Plan
This project seeks to disregard land ownership lines in favor of a "best use" strategy for land use planning. A Land Management and Habitat Conservation Plan for the wash planning area, comprised of approximately 5,000 acres spanning from the mouth of the Santa Ana River canyon to Alabama Street in the Santa Ana River wash, will be produced as part of this project. The Executive Summary of the concept plan for this project is attached as Appendix E.

3.1.8. Reserve Capacity

The District strives to uses the available native flows from the Santa Ana River and Mill Creek to improve and maintain groundwater levels in the Bunker Hill Basin. The Bunker Hill Basin requires continual recharge to protect against overdraft. On average, 200,000 acre-feet are produced each year from the Bunker Hill Basin. The Conservation District provides an average of 15,000 acre-feet of the total natural and artificial recharge, to this basin. As of Fall 2002, the Bunker Hill Basin is 300,000 acre-feet below its 1993 storage level – a commonly agreed-upon year when the major groundwater producers consider the basin "full."

3.2. Growth and Population

3.2.1. Population Information

The District's water conservation activities primarily support the communities of San Bernardino, Loma Linda, Redlands, and Highland, as well as the unincorporated county area of Mentone and various county "islands" within the incorporated cities. The 2000 census for these cities indicate a population of approximately 340,000 individuals, with an expected growth to approximately 460,000 people by 2020 – a growth of 35%[2]. The groundwater basin also serves as water supply for the city of Riverside. Growth in that region will have a significant effect on water use from this basin as well.

3.2.2. General Plan

The District does not prepare a General Plan.

3.2.3. Identify Significant Growth Areas

The most significant growth in population by 2020, as a percentage of current population, is expected in Highland (59%), Loma Linda (54%), and the

[2] Population data and growth predictions are from the Southern California Association of Governments (SCAG) 2001 Regional Transportation Plan Growth Forecast, available at http://www.scag.ca.gov/forecast/rtpgf.htm.

unincorporated Mentone area. In terms of absolute population growth, San Bernardino is expected to add the greatest number of individuals (over 70,000).

3.3. Financing Opportunities and Constraints

3.3.1. Finance Plans

Every year the District undergoes a planning and budgeting process. In this process the District identifies estimated income based upon known revenue sources, and capital improvements and maintenance projects desired for the upcoming fiscal year. These capital improvements and maintenance projects are prioritized, and cost estimates are determined, so that budget expenses are projected. The District operates within its projected revenue and expenses, making adjustments throughout the year in response to fluctuations in actual income and expenses. The District tends to operate with a "pay as you go" plan, funding capital improvements from reserves or operating budget rather than seeking financing.

3.3.2. Bond Rating

In resent years the District has not borrowed funds to complete large capital projects. The District has paid for any capital improvements through its general fund or its reserves. In the future, should the District choose to borrow money for large projects, it would take advantage of both fixed and variable rate financing, depending on the useful lives of the assets and the interest rate environment at that time.

3.3.3. Joint Financing Projects

The District is participating in three jointly funded projects: SOD Borrow Site Groundwater Conservation and Habitat Restoration Project; AB303 Grant to Install Groundwater Monitoring Wells; and the Upper Santa Ana River Wash Land Management and Habitat Conservation Plan.

3.3.4. Revenue Sources

The District receives revenue from several sources:

- Royalty payments on aggregate extraction;
- Groundwater charge on groundwater extracted;
- Investment income; and
- Miscellaneous income.

The District currently leases land to two mining companies. The leases are of varying length, and the royalty rate paid for each ton of aggregate extracted increases over time according to the provisions of the leases. This source represents approximately 50% of the district's annual revenue.

The current rate for the groundwater charge is $1.50 per acre-foot for agricultural uses, and $5.50 per acre-foot for all other uses. These rates are applied to every acre-foot of water extracted from the groundwater basin from within the District's boundary. The District sends out a semi-annual statement to each producer in its service area requesting payment of the charge based on that producer's production levels. This income represents approximately 30% of the District's revenue, and can be expanded by an action of the Board of Directors.

The District has reserve funds invested in LAIF, on which it receives modest interest income. The interest earned from these investments comprises 10% of the revenues for the District each year. Annually, or more often as needed, the District's Board of Directors reviews the investment policy to ensure the funds perform as well as possible while being conservatively invested.

The remain source of revenue comes from property tax income, property income, and reimbursements for programs or projects done on behalf of other agencies. This source represents approximately 10% of the revenue.

3.4. Cost Avoidance Opportunities

3.4.1. Overlapping/Duplicative Services

Other agencies authorized to provide water conservation service within the District's boundaries include the San Bernardino Valley Municipal Water District ("Muni") and the San Bernardino County Flood Control District ("Flood Control").

Muni's current groundwater recharge practice, as the District understands it, is to recharge surplus State Water into the Bunker Hill Basin. This occurs when a customer calls for State Water but is unable or unwilling to take that water at the time of scheduled delivery. This excess State Water is recharged into the groundwater basin and accounted for by Muni, which accounting allows Muni to export water from the basin in excess of their annual allotment. Muni does not own groundwater recharge facilities, and has no water rights on the native surface water of the valley.

Flood Control does own in-stream detention basins that can be used for groundwater percolation. The use of these basins for such purpose decreases their availability for use as flood control facilities by decreasing the available space inside the basins, which is not often an issue during the dry months. The City of San Bernardino uses these basins for groundwater recharge using state water purchased from Muni.

Though other agencies are authorized to provide water conservation services in this area, the District is the only agency whose primary focus is on responsible

recharge of the Bunker Hill Basin. Furthermore, the more than 90 years of water conservation by the District and its predecessors remains unmatched in the historic record of any other agency. This should not be considered a slight to the vital services provided by other agencies, but rather an indication of the well-placed focus each agency has had on its core missions.

3.4.2. Joint Agency Practices

The District is involved with several joint agency ventures, all of which help to reduce cost to the District. The most significant of these include the Upper Santa Ana River Wash Land Management and Habitat Conservation Plan, the Santa Ana River-Mill Creek Cooperative Water Project, the High Groundwater Mitigation Project, and the Drought Mitigation Project. All of these projects have been previously discussed in this document.

3.4.3. Rely On Other Agencies

Though reliance on other agencies is not currently necessary, the District recognizes the immense potential benefits associated with interagency cooperation and joint agency practices, and strives to implement such cooperation.

3.4.4. Growth Management Strategies

The District does not anticipate significant growth of its boundaries. The limited nature of the resources used by the District – in place and amount – suggests expansion beyond its sphere of influence would likely not have value. The District does anticipate annexing that portion of its sphere of influence that extends up the Santa Ana River, as that area is clearly benefited by the activities of the District.

3.4.5. Level of Service

The current level of service is limited, in large part, by the availability of water in the Santa Ana River and Mill Creek – service is supply rather than demand driven. Last fiscal year the District participated in a Drought Mitigation Project, whereby it paid half the discounted cost of state water to be spread within the District boundaries to alleviate low groundwater levels brought on by drought. The District is considering involvement in a similar project this fiscal year, and is analyzing the fiscal impacts and need for future rate increases associated with such significant expenditure.

3.4.6. Per-Unit Service Costs

The District's costs are largely fixed, and are generally inelastic with increased units of conservation provided. The cost to the "consumer" – in this case any party that pumps groundwater from within the District boundaries – is kept artificially depressed through the District's subsidy of its groundwater recharge activities with its aggregate mining royalty income.

3.5. Rate Restructuring

3.5.1. Rates

The District operates under legislatively mandated criteria for processing changes to the groundwater assessment rate. Changes to this process, such as mandating an increase with the consumer price index, are not possible under the constraints within which the District must operate. Changes to the rate itself are possible on an annual basis, based on the District's analysis of the appropriate groundwater recharge rate.

Income from aggregate mining royalties is set via contractual obligation, and cannot be changed except via amendment to those contracts. The contracts do contain provisions whereby the revenue accrued by the District increases over time.

3.6. Opportunities for Shared Facilities

3.6.1. Shared Facilities

The District is engaged in several facilities sharing plans. Of particular note is the Santa Ana River-Mill Creek Cooperative Water Project. This project is an agreement between ten public and private water agencies to facilitate transfers and exchanges of water amongst the members. Because the District is neither a wholesaler nor retailer of water, it was deemed the most objective and was selected to manage the program and the water transfers. The District has performed that role continuously since 1976. A report entitled *Bucket for Bucket*, explaining this cooperative agreement, is attached as Appendix F.

The District has a rich history of opening its facilities to use by others. This includes beekeepers, model airplane clubs, city trail events, permanent city trails, and general use by other local agencies. In particular, the District has opened its percolation basins to other parties wishing to conserve water in this groundwater basin. This ethic is continued in such projects as the Upper Santa Ana River Wash Land Management and Habitat Conservation Plan.

3.6.2. Duplication of Facilities

District facilities are, in essence, diversion structures on the Santa Ana River and Mill Creek, and percolations basins with which to recharge the groundwater basin. Other agencies are capable of diverting water from these two sources, but lack the capability to effectively recharge the groundwater basin. Flood Control has detention basins that can be used for percolation, but such percolation generally does not benefit users at the east and south end of the basin, such as Highland, Redlands, Loma Linda, and Grand Terrace. In short, there is very little local duplication of the District's facility set.

3.7. Government Structure Options

3.7.1. Agency Recommendation

The District has been operating successfully for over 70 years as an independent special district. This governmental structure offers the flexibility and focused mission necessary for the District to react to changing conditions, while still maintaining its high standard of service. The District recommends no change to its governmental structure at this time.

3.7.2. Hurdles to Consolidation/Reorganization

The District was formed by a vote of the people in 1931. Reorganization under a different governmental structure, consolidation, or dissolution would require another vote of the people.

In addition, the District believes the local groundwater producers would be reluctant to see any such consolidation or reorganization. Despite the legal authority for two other agencies to recharge water into this groundwater basin, the local users have consistently sought out participation of the District when requesting changes to the recharge regime, or with questions about existing recharge.

3.7.3. Recommended Options

The District currently offers limited recreation and land/habitat management services. These roles may increase in the future with evolving land use, especially associated with the Upper Santa Ana River Wash Land Management and Habitat Conservation Plan.

3.8. Evaluation of Management Efficiencies

3.8.1. Training Opportunities

The District provides its employees with a safe work environment and the training necessary to educate them about proper working procedures. All district employees receive numerous hours of training that increases their awareness of safety in the workplace. As specific examples, District staff receives first-aid, CPR, and defensive driving training. The District's insurance provider conducts an annual review of the District offices and field facilities for safety in the workplace.

The District also places a high value on the training of managers and administrative employees to ensure they are at the top of their profession with technology, techniques, and methods available to perform their job. Attendance is sponsored at various professional seminars, and the District offers an educational reimbursement program to any employee pursuing credentialing or other educational goals.

3.8.2. Staffing Levels

The District is a small, highly trained organization that is involved in many aspects of managing the Bunker Hill Basin. Because of the limited financial resources that District maintains a small, flexible staff. Staff consists of a General Manager, Assistant General Manager, Administrative Services Manager, Project Manager, GIS/CADD Analyst, (2) Administrative Assistants, and (2) Field Operation Specialists.

3.8.3. Technology

The District maintains a Local Area Network connecting staff computers to a fileserver. The District upgrades its hardware on a rotating three-year schedule to guard against obsolescence.

The District has begun a program to convert all existing paper documents into digital format. The purpose for this task is to aid in research, consolidate space, and provide backup of these important documents. A significant portion of the paper documents includes historic data associated with water levels, well information, and studies in the Basin. This database is being developed in conjunction with other agencies. Many local agencies and consultants look to the District for information, and the District takes pride in being able to offer this service.

3.8.4. Budget

In recent years, the Board of Directors has taken time to implement an expanded annual budget process. Part of this expanded process involves Board review, at a public workshop, of the District's goals and objectives relating to its mission. The review affirms guidelines for long-range planning, provides a baseline for District activities during the next fiscal year, and serves as the foundation for the annual budget.

The District's mission is:

"The Mission of the San Bernardino Valley Water Conservation District is to ensure recharge of the Bunker Hill Groundwater Basin in an Environmentally and economically responsible way, using local native surface water to the maximum extent practicable.

We strive to improve the supply and quality of groundwater, balancing such demands with those of land, mineral, and biological resources."

This mission statement provides four goals for long-range planning:

- Recharge local native surface water to the maximum extent practicable;
- Ensure recharge operations are accomplished in an environmentally and economically responsible way;
- Strive to improve the supply and quality of groundwater; and
- Balance the demands of groundwater recharge, supply, and quality with those of land, mineral, and biological resources.

Each fiscal year the District performs a through planning and budgeting process, identifying the capital improvements and maintenance projects for the ensuing fiscal year. An essential step in this process is identifying income based upon the revenue sources. The District prioritizes the capital improvements and maintenance projects, estimates revenue and expenses, and compiles a budget for the next fiscal year. This budget is presented to the Administrative Committee in a public meeting, who reviews the budget and makes recommendations to the Board of Directors. The District operates within its projected revenue and expenses, making adjustments throughout the year in response to fluctuations in actual income and expenses. The District tends to operate with a "pay as you go" plan, funding capital improvements from reserves or operating budget rather than seeking financing. Attached, as Appendix G, is a copy of this year's annual budget.

3.8.5. Joint Powers Agreements

The District is not part of any Joint Powers Agreements.

3.9. Local Accountability and Governance

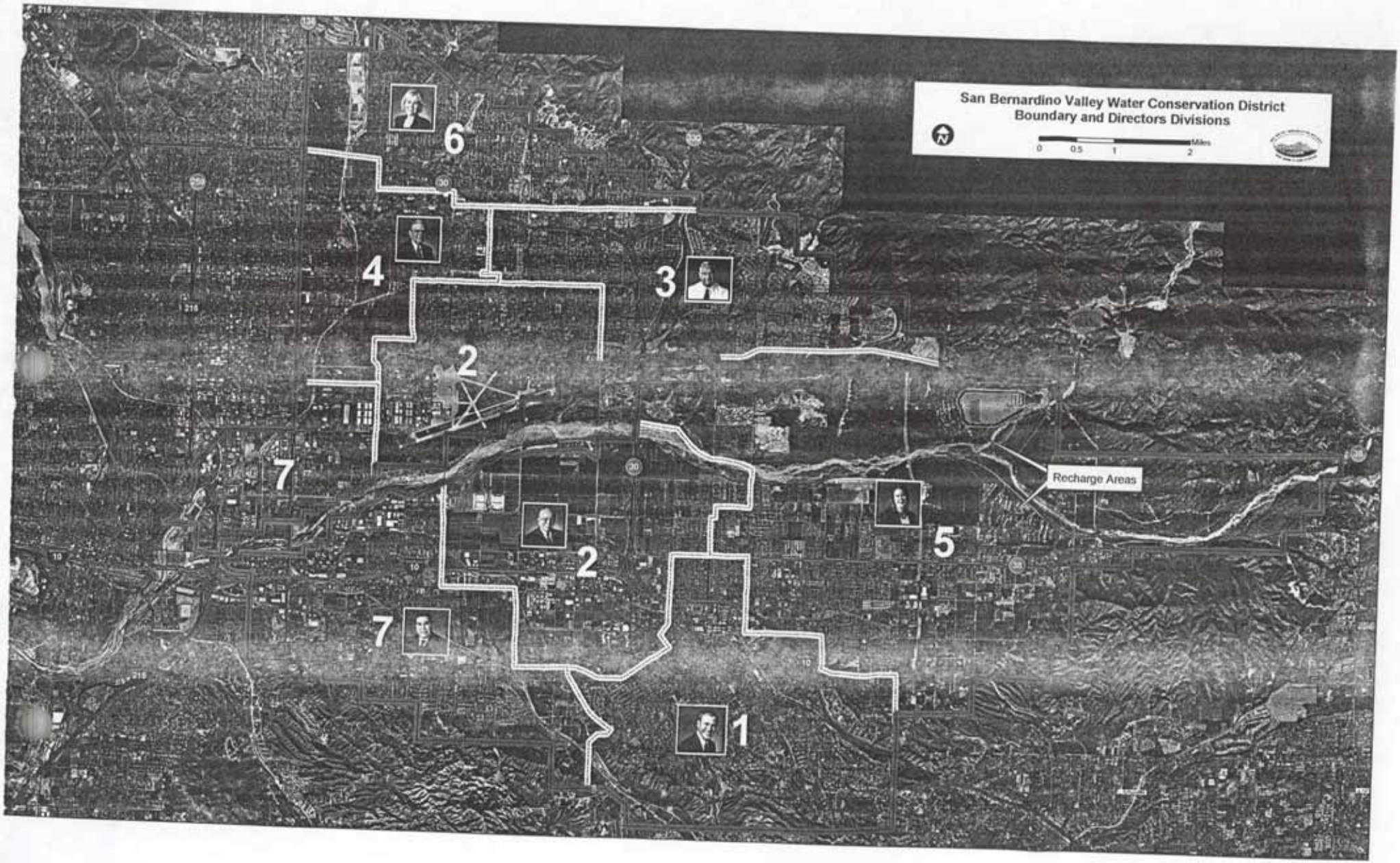
3.9.1. Governing Body

A publicly elected Board of Directors governs the District. Each of the seven Directors represents a specific demographic-geographic division for a period of four years. Elections occur during the odd years, with approximately half the Board facing re-election each cycle. The current division boundaries, as well as each division's duly elected representative, are shown on the attached Figure 1.

The Board of Directors meets regularly on the first Wednesday of each month. Three standing committees, each comprised of three Directors, typically meet monthly as well. These are the Resources, Administrative, and Outreach committees. All of these meetings are open, public meetings that conform to the requirements of the Brown Act.

3.9.2. Customer Feedback

The District does not have customers in the same sense that a water retailer or wholesaler would, as this organization does not directly exchange a good or service for some equivalent compensation. Despite this, the District generally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views the local groundwater pumpers, and specifically the local water purveyors, to be its customers.

Numerous opportunities exist where the District solicits feedback from its customers. The most obvious of these is at its monthly public meetings. The District is also involved in a number of groups or committees where feedback about its practices would be appropriate, including the Upper Santa Ana Water Resources Association (for its water resource practices) and the Upper Santa Ana River Wash Land Management and Habitat Conservation Plan Task Force (for its land and environmental resource practices). Meetings of both these groups include District "customers" and are open to the public. In addition, members of both the Board of Directors and the District staff are involved in the community, with such organizations as Chambers of Commerce, the Cal State San Bernardino Water Resources Institute, and other organizations.

3.9.3. Access

Offices of the District are open 8am to 5pm, Monday through Friday, and are open to walk-in public. In addition, various parties who might have need to contact District staff after-hours have the appropriate information to do so.

Information about the District can be found online at http://www.sbvwcd.dst.ca.us, which includes contact information for the office. News releases are issued at various times to the local papers – The Sun and The Press-Enterprise.

3.9.4. Regular Progress Reports

As part of the District's annual review of its groundwater assessment rate, the District produces an Engineering Investigation of the Bunker Hill Basin. This report describes the past, current, and expected near-future status of the groundwater basin. District staff meets with local groundwater producers to discuss the report, to present a brief financial analysis of the money spent by the District on groundwater recharge compared to the money received through the groundwater assessment, and to discuss potential future projects. Subsequently, the Board of Directors holds a public hearing at which similar issues are discussed, and public comment is invited. This ties in to creation of the District's annual budget, which is accomplished through open committee and Board meetings.

June 2004 DRAFT

PROGRAM FOR EFFECTIVE RECHARGE COORDINATION (PERC)

SAN BERNARDINO VALLEY
WATER CONSERVATION DISTRICT

JUNE 2004

June 2004 DRAFT

PROGRAM FOR EFFECTIVE RECHARGE COORDINATION (PERC)

San Bernardino Valley Water Conservation District

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History of Revisions

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PURPOSE AND FUNCTION OF THE PROGRAM FOR EFFECTIVE RECHARGE COORDINATION ("PERC")

The purpose of the PERC is to provide guidelines and procedures for the determination of annual water recharge/operational practices conducted by the San Bernardino Valley Water Conservation District ("District") under the authority of the Water Conservation District Law of 1931. This document is intended to guide the District's current and future activities while ensuring the District continues to operate in an economic, efficient, and environmentally sound manner.

The PERC is intended to provide information useful not only to the District, but to the public and other entities. Therefore, it describes the District's goals, objectives, and policies related to water recharge operation and groundwater management, and covers a variety of topics. These include a brief history of the District and a description of its facilities and general operations in Section 1, an introduction to the Bunker Hill basin and its groundwater-related issues in Section 2, and an introduction to groundwater management in the basin in Section 3. This manual specifies in Section 4 the procedures that will be followed on an annual basis to determine the District's groundwater charge. The PERC will be evaluated and updated as necessary to reflect updated information and conditions.

1. OVERVIEW OF THE DISTRICT

1.1. CURRENT MISSION

"The mission of the San Bernardino Valley Water Conservation District is to ensure recharge of the Bunker Hill Groundwater Basin in an environmentally and economically responsible way, using local native surface water to the maximum extent practicable.

We strive to improve the supply and quality of groundwater, balancing such demands with those of land, mineral, and biological resources."

1.2. HISTORY OF THE DISTRICT

Natural water supply to the San Bernardino Valley is characterized by significant fluctuations in annual flow, with periods of both drought and high flows occurring intermittently. The District and its predecessors have engaged since 1912 in water conservation (groundwater recharge) activities at the upper end of the Santa Ana River wash and on Mill Creek just upstream of the confluence with the Santa Ana River. These areas overlie the Bunker Hill groundwater basin in the San Bernardino valley. The District captures surface water primarily during storm events and channels it to two systems of recharge basins, where it percolates into the groundwater basin for later use by local entities. The District thereby enhances the reliability of local water supply by augmenting groundwater supply through active recharge with surface waters.

In 1931, local citizens voted to create the District as a public agency, under the Water Conservation Act of 1931, to better conserve the waters of the Santa Ana River and to protect against excessive export of the local surface water by downstream agencies. The Water Conservation Act of 1931 provides broad authority for the District to exercise a variety of powers necessary to further its primary goal of conserving water.

The District has historically operated water recharge facilities in two areas: the Santa Ana River and Mill Creek. In 1935, East Lugonia Mutual Water Company transferred to the District its jurisdiction for conserving water from Mill Creek. A similar transfer occurred in 1940 when the property and duties of the Water Conservation Association – primarily concerned with the Santa Ana River – were deeded over to the District.

The District's boundaries (Figure 1) cover more than 50,000 acres, and include the communities of San Bernardino, Loma Linda, Redlands, and Highland, as well as the unincorporated county area of Mentone and various county "islands" within the incorporated cities. The 2000 census data for these cities indicate a population of approximately 340,000 individuals, with an expected growth to approximately 460,000 people by 2020 – a population increase of 35%. The water supply for the city of Riverside is also supplemented by water drawn from the groundwater basin underlying the District.

The amount of water recharged by the District depends on precipitation in the mountains as both rain and snow. Over the period of its history the District has

recharged the groundwater throughout the year, and has put as much as 104,000 acre-feet of native (local) water into the groundwater basin in a single year. In addition to conservation of native water, the District has recharged imported water during dry periods to supplement its recharge with native waters.

1.3. DISTRICT FACILITIES

The District's recharge activities occur within the Wash Area, which was formed by the deposition over time of alluvial materials in what was historically the natural floodplain of the Santa Ana River. The Wash Area encompasses more than 5,000 acres of land and is characterized by well-drained, sandy substrates. The drainage characteristics of the Wash Area facilitate effective water conservation by permitting groundwater recharge at relatively rapid percolation rates. As a result, it has been used traditionally for percolation basins for groundwater recharge, which provides a significant part of the water supply for the local region. The District owns properties, has water conservation easements over others, and has the potential to utilize certain land presently under the control of the U.S. Bureau of Land Management (BLM). Collectively, these land resources total approximately 3,650 acres.

The District and its predecessors have developed facilities in, and diverted water from, Santa Ana River and Mill Creek for more than 90 years. Portions of the canals and percolation basins now used by the District were improved or expanded in the 1930s. Exhibit 3-3 depicts the District's points of diversion, canals, and spreading basins. The District has ownership or other rights to use these canals and spreading basins for groundwater recharge purposes. The major facilities are described below.

1.3.1. Santa Ana River

The District's primary diversion and recharge facilities on the Santa Ana River are the Main Santa Ana River Diversion facility (Main SAR Diversion) at the site of the Cuttle Weir, the Main Santa Ana River Canal (Main SAR Canal), and the Santa Ana River percolation basins in the Wash Area. These facilities have the physical capacity to divert as much as approximately 485 cfs instantaneously. During the period since the Orange County Judgment in 1969, the District has recharged as much as 52,172 acre-feet annually (in 1978) from the Santa Ana River.

The Main SAR Diversion is a reinforced concrete structure on the Santa Ana River less than one-half mile downstream of the Seven Oaks Dam. This facility sits at the edge of the river channel at the site of the old Cuttle Weir, which stretched across the entire river channel before construction of the dam. The facility has six gates that can be independently operated to allow varying amounts of water to be diverted into the District's Main SAR Canal. This facility has a design capacity of 1,000 cfs. However, diversion rates are limited by the capacity of the culvert under Greenspot Road (see below).

Almost immediately downstream of the Main SAR Diversion are two more sources of surface water in the District system, the Tailrace Pipeline and the Northfork pipeline. The Tailrace Pipeline transports water from the afterbay of the Southern California Edison (SCE) Hydroelectric Powerhouse No. 3. The water in the SCE system is diverted at several points on the Santa Ana River and its tributaries upstream of Seven Oaks Dam. The Northfork pipeline also connects into the District system, allowing surface water to be diverted from the East Valley Water District system. The water in the Main SAR Canal passes under Greenspot Road in a reinforced concrete box culvert (tested at 485 cfs) and is measured in the Parshall Flume. The Main SAR Diversion, Main SAR Canal, Greenspot Culvert, and Parshall Flume were all constructed or improved in the early 1930s.

The Main SAR Canal is bifurcated shortly below the Parshall Flume into the North Canal and South Canal. The North Canal runs west along the northern border of the Seven Oaks Dam Pervious Material Borrow Site (Borrow Site) and into the District's recharge area to the west. The North Canal feeds directly into percolation basins 10N, 13, 15N, 17N, and D. Water is passed to those basins not directly connected to the North Canal through a series of overflow culverts and canals.

The South Canal carries water south, along the eastern border of the Borrow Site, for delivery to the Borrow Site. Three percolation basins have been reconstructed in the Borrow Site and are available for spreading. In addition, water can be percolated at the far west end of the Borrow Site. The South Canal and associated bifurcation structures and the three reconstructed percolation basins were all built since 2000, subsequent to excavation of the Borrow Site by the U.S. Army Corps of Engineers (Corps), in an effort to partially replace the recharge capacity lost through that excavation.

The total acreage of the Santa Ana River percolation basins has varied over time. The current acreage is 63.49, including 6.81 acres of reconstructed basins in the Borrow Site but not including approximately 122 additional acres available within the Borrow Site for water storage and incidental recharge.

1.3.2. Mill Creek

The District's primary facilities on Mill Creek are the Mill Creek Intake Structure, the North and South Canals, and the Mill Creek percolation basins. The Mill Creek facilities have the physical capacity to divert as much as 90 cfs instantaneously. During the period since the Orange County Judgment, the District has recharged as much as 19,800 acre-feet annually (in 1993) from Mill Creek.

The Mill Creek Intake Structure lies approximately two miles upstream of the confluence of Mill Creek and the Santa Ana River. The Corps reconstructed the District's Mill Creek diversion structure in the 1980s as part of a flood protection project for the Santa Ana River Main Stem. The Intake Structure is rated at 90 cfs. The facility feeds Mill Creek water into the North and South canals, which convey the water to percolation

basins 12 and 1, respectively. These two basins act as sandboxes, allowing sediment to settle out of the diverted surface water before the water flows via overflow culverts and canals into other percolation basins. The majority of the District's Mill Creek percolation basins were built early in the District's history, with some additional westerly basins constructed in 1997–2000.

In addition to the water diverted from Mill Creek, the District is also able to spread Santa Ana River water in its Mill Creek recharge area. This is accomplished by conveying the water through one or more of three different pipelines. The Greenspot Pipeline conveys water from the Greenspot Forebay (the old SCE Powerhouse No. 3 forebay), and can deliver that water into the District's North Canal. The Bear Valley Highline conveys water from the same forebay, and can deliver the water into Mill Creek upstream of the District diversion facility. The Redlands Aqueduct conveys water from the SCE Powerhouse No. 3 afterbay, and can deliver water to the District's western Mill Creek percolation basins.

The total acreage of the Mill Creek percolation basins has increased over time. The current acreage is 65.50.

1.3.3. Facility Maintenance

The District performs occasional maintenance of its facilities as needed. These facilities fall into six categories, as described below.

Canals

Canals are typically dug into the existing topography and are left with their natural surface. Depending on the canal, the bottom and sides of the canals may develop natural rock armor over time, as the fine material is washed away, or may experience sedimentation. Maintenance activities include clearing encroaching vegetation, removing sediment, and repairing washouts or erosion. Washout and erosion repair is typically accomplished by filling in the eroded area with native material and sometimes with grouted rock. Vegetation control usually occurs annually, and other activities occur infrequently as needed.

Culverts

Typically pipe or box culverts are used to pass water in a canal under a road crossing. Maintenance activities include clearing encroaching vegetation, clearing of debris or sediment in the nearby canal, and repairing damage to the nearby canal or the culvert itself. Repair of the nearby canal is required when the canal sides above or below the culvert erode or wash out, and such repair is typically accomplished by filling in the eroded area with native material and sometimes with grouted rock. Repairing the culvert itself typically requires excavation of the roadway. Vegetation control usually occurs annually, sediment removal every two to three years, and the remaining activities infrequently as needed.

Dikes

Dikes typically comprise native material, from which much of the rock has been removed, formed into a berm 5 to 15 feet high. Native vegetation is left to grow on the slopes of dikes. Water passes from one basin to the next through overflow culverts, typically constructed of corrugated metal pipe with a concrete headwall, that pass through the dikes. Maintenance activities include occasional excavation and compaction of the dike material at the source of leaks, similar work to replace broken overflow culverts, and repair of washouts. Such repairs occur infrequently as needed.

Basins

Basins are typically areas of shallow excavation on the upstream side of dikes, and are where the actual water percolation takes place. Flow of water into these basins brings suspended sediment, which is dropped to the basin floor with percolation of the water. Periodic removal of this sediment is required in order for percolation rates to remain efficient. The removal process also tills the basin floor. Maintenance activities include clearing encroaching vegetation and removing sediment. Vegetation control usually occurs annually, and sediment removal occurs every 1–5 years depending on the basin, storm intensity, and other variables.

Diversion Structures

These structures divert water from the Santa Ana River and Mill Creek into the District's facilities system and, once in the system, from canals into basins. The diversion structures typically consist of concrete or cement block, with wooden gates and associated hardware. Maintenance activities include clearing encroaching vegetation, clearing debris or sediment from the nearby canal, repairing the nearby canal, and repairing damage to the structure itself. Repair of the nearby canal is required when the canal sides above, below, or around the diversion structure erode or wash out, and such repair is typically accomplished by filling in the eroded area with native material and sometimes with grouted rock. Vegetation control occurs annually, removal of sediment occurs every two to three years, and all other activities occur infrequently as needed.

Access Roads

Roads are typically 12 to15 feet wide and surfaced with native material such as gravel or compacted soil. Maintenance activities include clearing encroaching vegetation, filling ruts and potholes, grading, resurfacing (with similar materials), and repairing washouts. Vegetation control usually occurs annually, and other activities usually occur every two to three years.

1.4. DISTRICT OPERATIONS

1.4.1. Diversion

Recharge activities conducted by the District and its predecessors have occurred year round and are subject to certain internal and external limiting factors. The primary factors influencing diversion and recharge activities are the water level within the basin

and the availability of water from the Santa Ana River and Mill Creek, both of which have highly variable flows on a daily, seasonal, and annual basis. District recharge operations are also constrained at times by the potential for high groundwater at the west end of the basin. Because of the tilted nature of the groundwater aquifer, which slopes downward from east to west, and the barrier that the San Jacinto fault presents to groundwater flow west of San Bernardino, groundwater levels may rise unacceptably close to the ground surface under certain conditions, creating the potential for flooding of property and increasing the potential for soil liquefaction during an earthquake. While the potential for high groundwater conditions has been a consideration in the District's operational decisions in the past, specific criteria have not been formulated previously for evaluating potential high groundwater conditions.

Internal factors, while perhaps less important, tend to occur more frequently. These factors include consideration of the sediment load in the water the District is able to divert. While the District's facilities can typically accommodate high sediment loads, it is not unusual for the District to leave the "first flush" of a storm in the river, as early storm flows tend to be laden with excessive sediment and debris. The District is always cognizant of the risk to facilities posed by sediment and debris, but this risk is considered in the context of overall water availability. During periods of water scarcity, the District may divert and recharge water during the first flush of a storm. Recharge management actions are also occasionally constrained by the need to repair facilities.

1.4.2. Percolation

The District's recharge activities are governed by the overall objective of maintaining groundwater at optimal levels throughout the Bunker Hill Basin. Future operations are expected to improve recharge management to improve the efficiency of recharge. In the Mill Creek facilities, the preference between use of the North and South canals for spreading Mill Creek water is based largely on the current condition of the "sandbox" basins 12 and 1. Otherwise, water is recharged where there is available room in percolation basins.

1.4.3. Monitoring

The District conducts extensive groundwater-level and streamflow monitoring to assist with its overall recharge operations. The District takes monthly readings on eight monitoring wells in and near its recharge areas – four near the Santa Ana River recharge area and four near the Mill Creek recharge area. The District also receives groundwater-level readings from the owners of numerous other wells in the Bunker Hill Groundwater Basin. These groundwater levels, as well as information on production and recharge, are compiled into an annual engineering investigation and report.

The District collaborates with other stakeholders in the groundwater basin to share and evaluate monitoring data. This occurs through such organizations as the Upper Santa Ana Water Resources Association and such collaborative projects as the High Groundwater Mitigation Project and the Drought Mitigation Project.

In 2003, the California Department of Water Resources (DWR) awarded the District a $230,000 grant under Assembly Bill 303 (Local Groundwater Assistance Act of 2000) to support the installation of two 400-foot-deep groundwater monitoring wells in the Santa Ana River and Mill Creek forebays, with the planning and design phase to begin in early 2004. In addition, ten new monitoring wells were completed through the High Groundwater Mitigation Project, in which the District is a participant.

Water-level data from new wells are collected at the time of well installation and are, or will be, collected on a continuing basis as part of the groundwater monitoring program conducted by the District. These data will fill important gaps in the current groundwater-monitoring network, and will assist the District in more fully understanding the effects of recharge on groundwater levels. This information will be shared with all the stakeholders in the basin and will assist the District in managing its limited water resources.

2. BUNKER HILL GROUNDWATER BASIN

The District's recharge operations are conducted in a distinct groundwater basin in the San Bernardino Valley commonly referred to as the "Bunker Hill basin." This basin is generally defined by bedrock (San Bernardino Mountains) to the northeast, the Crafton Hills to the south, and the San Jacinto fault (acting as an effective barrier to groundwater movement) to the southwest. Figure 5 delineates the Bunker Hill basin, including various geologic faults. Hydrologic sub-areas of the Bunker Hill basin have been identified, and are also shown in Figure 5.

2.1. GROUNDWATER LEVELS

A significant challenge to water managers in the San Bernardino Valley is to balance groundwater levels in different parts of the Bunker Hill Basin. The subsurface aquifer slopes from the east, where the District's percolation basins are located, downward to the west, and water migrates in that direction. An important water management issue is maintenance of groundwater levels at adequate depths below ground surface in the pressure zone located within the City of San Bernardino and immediately upstream of the San Jacinto fault, which forms the western boundary of the basin. Historically, the water table intersected ground surface in this area, causing groundwater to rise above ground surface in low-lying areas.

A century ago, the south side of San Bernardino contained lakes and ponds (Sahagun 1985). Numerous early irrigation wells were artesian and flowed freely at ground surface (Lippincott 1902, Mendenhall 1905). Mapping performed in 1915 by Hyde Forbes, a prominent California civil engineer, based on measurements of some 70 wells in a 16-square-mile area east of Sterling Avenue in the city of San Bernardino, showed a large area of groundwater within 10 feet of ground surface (Forbes 1915). This is illustrated in Figure 6. Shaded areas indicate depth to groundwater based on United States Geological Survey ("USGS") topographic maps. Note the large area of groundwater within ten feet of ground surface and the relation of shallow groundwater areas to City Creek, Warm Creek, and the Santa Ana River drainages.

Groundwater pumping and drought lowered the water table for several decades until the end of the 1960s, during which time the land had become occupied by commercial and residential development. Above-average rainfall and increased natural and artificial recharge of groundwater then led groundwater levels to rise again. By 1979, the groundwater was alleged to have entered the basements of certain buildings in this area. Figure 7 shows the minimum depth to groundwater during the 1973-1983 period. Note the shaded area, which indicates groundwater levels less than ten feet below ground surface, encompasses a major portion of the city area east of the San Jacinto Fault. Because Warm Creek and the Santa Ana River act as groundwater drains, the shallow groundwater extends upgradient in the vicinity of these channels.

The high groundwater problem was alleviated by the drought beginning in 1986 and extending into the 1990s. Recharge of groundwater (both natural and artificial) was

greatly reduced while pumping for an ever-growing population increased, causing the water table in San Bernardino to decline, and thereby reducing the flooding problem considerably in recent years.

Complicating the flooding problem is the potential for liquefaction of the recent alluvium in the event of a major earthquake. A comprehensive study by the USGS (Matti and Carson 1991) revealed that a major seismic event on any nearby fault – San Andreas, San Jacinto, or Cucamonga – could cause extensive damage to structures and transportation arteries with a water table close to ground surface. The phenomenon is well understood and stems from the fact that the vibration caused by an earthquake can disturb the particle framework in cohesionless granular soils, such as loose sandy sediment, leading to increased compaction. If the sediment is saturated, water in the pore spaces resists this compaction and exerts pore pressure that reduces the intergranular particle stress. This can cause the sediment to lose its strength and change from a solid state to a liquid state, thereby resulting in ground failure at or near the surface. Such liquefaction usually occurs at depths of less than 50 feet, with most susceptible conditions at depths shallower than 30 feet.

Much of the high-groundwater condition in the western part of the basin evolves as a matter of timing. During years of near-normal or below-normal rainfall, pumping of groundwater, particularly in the urbanized central and western portions of the basin, equals or exceeds total recharge from all sources. However, in wet years, and especially a series of such years, increased precipitation rates result in high volumes of natural recharge. At the same time, basin recharge rates tend to increase because of the availability of above-average streamflow. Historical evidence illustrates these circumstances occurred in the 1938-1948 and 1979-1984 periods. Figure 8 depicts precipitation at two gages that reflects runoff in the upper reaches of the Santa Ana River. One gage is at Big Bear Lake in the mountains and the other gage is at a lower elevation at Seven Oaks Dam.

Notwithstanding the potential for high groundwater, natural recharge is already being limited by urbanization, which makes the continuation of artificial recharge crucial to maintaining the groundwater supply. The solution to the high groundwater problem depends on what can be done to manage water levels in the city area in a timely manner so as to ensure that groundwater can be kept at a safe depth below ground surface. Two basic solutions to the high-groundwater problem are to increase output from the basin or to limit input to the basin. These approaches are discussed in more detail in Section 3.2.2 and Section 3.2.3, respectively.

2.2. SOURCES OF GROUNDWATER RECHARGE

Groundwater recharge within the basin comes from both natural and artificial recharge. The District's recharge basins are located adjacent to the Santa Ana River and Mill Creek, and maps of the water table show that groundwater recharged from the two streams and the District basins flows from this northeasterly portion of the basin toward

the zone of high groundwater in the San Bernardino city area. This inflow represents one component of a system of radially converging groundwater from natural and artificial recharge areas such as Lytle and Cajon creeks to the northwest, Waterman Canyon Creek to the north, and City and Plunge creeks to the northeast (Exhibit 5.2-5). Together, these sources contribute water that merges to create the high groundwater conditions that have occurred at times within the city of San Bernardino. The restriction posed by the San Jacinto fault impedes groundwater flow, causing it to accumulate, rise toward the ground surface, and spill over the fault zone. Direct rainfall recharge is considered insignificant. Approximately 75% of annual precipitation occurs in December through March, with most precipitation occurring in the mountains. Consumptive use exceeds average annual rainfall on the valley floor, so urban development relies heavily on runoff from the surrounding mountains to supply the deficit (Moreland 1972).

The contribution of District artificial recharge to water supply was evaluated through a review of the District's recharge of Santa Ana River and Mill Creek water relative to basin-wide storage and use. The change in total groundwater storage plus basin extractions was used to define total basin recharge, which was then compared to the magnitude of the District's contribution. Annual data for the period 1969–1998 are tabulated in Table 1 and are depicted in Figure 9. Recharge data are from District records. Groundwater pumping data are from Western Municipal Water District and San Bernardino Valley Municipal Water District (2001). Storage change data for 1993–1998 are from annual District Engineering Investigation of Bunker Hill Basin reports, which were first produced in 1993. Storage-change data for 1969–1992 are from San Bernardino Valley Municipal Water District (2002). Note that data listed in Table 1 are annual totals for slightly different time periods, as indicated in the table footnotes. In addition, there are slight differences in Bunker Hill Basin boundaries. However, these data are still representative of the District's contributions toward total groundwater recharge. The composite data reveal a median annual contribution of District artificial recharge to total recharge of 9%, and a mean of 10%.

Total basin recharge is expressed in Table 1 and Figure 9 as the sum of extractions and change in storage. It also represents the sum of artificial and natural recharge. Artificial recharge occurs through recharge basins, defined structures with measured quantities of inflowing water. Natural recharge occurs in stream channels where the wetted areas vary widely with streamflow rate, making it difficult to measure. As a result, the magnitude of natural channel recharge is often underestimated.

Table 2 lists major streams in the Bunker Hill Basin and their estimated maximum channel areas available for recharge (Moreland 1972). In addition, the last column in Table 5.2-4 indicates maximum recharge capacities assuming an average infiltration rate of four feet per day. Streamflows smaller than major flood flows occupy smaller wetted areas, so recharge capacities during non-flood periods are correspondingly less. Furthermore, recharge rates vary with permeability of subsoil, amount of suspended

material transported by flowing water, and availability of storage space underground. The areas listed in Table 5.2-4 total more than 5,000 acres; this contrasts with a maximum wetted area of 129 acres in the District's Santa Ana River and Mill Creek recharge basins, or 3% of that in major stream channels. It is through the District's efficient control of the timing of recharge that an area of 3% provides 10% of the recharge.

2.3. WATER QUALITY

A water management plan must consider water quality as well as water quantity. The water quality of surface waters entering the groundwater basin, as well as the water quality of the groundwater, must be closely monitored and properly managed.

2.3.1. Surface Water

The surface waters entering the Bunker Hill Basin are of excellent quality, with low concentrations of TDS, nitrates, and other pollutants, because the Bunker Hill Basin is the first groundwater basin beneath the San Bernardino Mountains. There is little pollution of the surface waters from upstream activities, although some are possibly affected by urban development in the mountain areas. The majority of the San Bernardino Mountains are within a national forest, which limits the area within which development can take place. In addition, much of the existing development is in another watershed that does not drain toward the Bunker Hill Basin. Urban runoff from the Big Bear area enters Bear Lake, but all sewage is exported to Lucerne Valley. Sewage from Running Springs is released in the Plunge Creek drainage area. Mill Creek receives urban runoff from Forest Falls and Forrest Home and all sewage is disposed to underground facilities tributary to Mill Creek. (San Bernardino Valley Water Conservation District 2004.) Table 3 lists the total dissolved solids ("TDS") and Nitrate levels detected in Mill Creek and Santa Ana River.

2.3.2. Groundwater

Historically, the land overlying the Bunker Hill Basin was used for agriculture; the same area today either continues in agricultural use or has been developed. In developed areas, there is ongoing irrigation of land surface areas in parks, lawns, and other landscaped areas. Because the overlying materials are permeable, the water applied to crops and landscaped areas can readily infiltrate downward and reach the groundwater table, carrying with it pesticides and fertilizers. The transport of fertilizers into the groundwater basin has resulted in large areas in the eastern portion of the Bunker Hill Basin showing high concentrations of nitrates.

Recent studies have shown increases in the general mineral content of the groundwater in the Bunker Hill Basin in several areas. The Santa Ana RWQCB objective is to maintain maximum levels of TDS of 260 milligrams per liter (mg/L) in the Lytle Creek area, 330 mg/L in the eastern portion of the basin, and 310 mg/L in the pressure zone (at the west end of the basin). The TDS of groundwater pumped by municipal wells in

1993 ranged from 130 to 560 mg/L, an average of about 315 mg/L (San Bernardino Valley Water Conservation District 2004).

The importance of groundwater recharge with native Santa Ana River water to the Bunker Hill Groundwater Basin has been documented in the TIN/TDS Groundwater Study (Wildermuth Environmental 2000) conducted on behalf of the SAWPA. The study involved extensive investigation by a task force composed of water and wastewater agencies in the Santa Ana River watershed. The study analyzed groundwater dynamics and quality in the San Bernardino Valley and Yucaipa/Beaumont Plains areas, resulting in the development of spatial boundaries for groundwater management zones and compilation of point statistics at wells that represent ambient conditions for a historical period (1954 to 1973) and the current period (1978 to 1998).

The TIN/TDS study found that, within the Bunker Hill-B Groundwater Basin where the District recharge facilities are located and extending about 10 miles west from the facilities, levels of nitrate-nitrogen, expressed as total inorganic nitrogen (TIN), have improved from an ambient level of 7.3 mg/L in the historical period to a level of 5.5 mg/L in the current period. Similarly, the concentration of TDS has improved from the historical level of 332 mg/L to the current level of 261 mg/L. It is reasonable to conclude that the noted improvements in water quality in this portion of the basin are partially attributable to the District's continued recharge with high-quality Santa Ana River water. In addition to nitrate problems, the groundwater in the basin has six contamination plumes, as described below.

San Bernardino County Dump Plume - This is the smallest of the six identified plumes, and involves trichloroethylene (TCE) and tetrachloroethylene (also called perchloroethylene) (PCE). The plume is located in the northwest corner of the basin and may be emanating from a former county landfill that is no longer in operation.

Muscoy Plume - This plume is near the western edge of the Bunker Hill Basin, adjacent to the San Jacinto fault. This plume involves TCE and PCE and has been added to the EPA Superfund list for cleanup. This plume has become part of the Newmark Plume.

Newmark Plume - This is one of the largest known plumes in the basin, involving TCE and PCE in an area north of San Bernardino. This is listed as an EPA Superfund site for cleanup. The City of San Bernardino has installed wellhead treatment on several wells in a program to clean up this extensive plume, which has now migrated from the forebay/recharge area of the basin into the pressure zone.

Santa Fe Plume - This plume is located in the central San Bernardino area and is being investigated by the RWQCB, with preliminary work having begun for the investigation and cleanup. TCE and PCE are the primary contaminants.

Norton Plume - This plume has undergone extensive cleanup by the Department of Defense Superfund program. This plume is thought to have resulted from the spills of various solvents (including TCE and PCE and possibly other hydrocarbons) and radioactive substances at Norton Air Force Base. This plume is located upgradient of the San Bernardino area in the Bunker Hill Basin and has been observed to be migrating toward the west.

Redlands Plume - This large plume, about seven miles long in 1993, lies in the northern part of Redlands and involves dibromochloropropane (DBCP), "perchlorate," and TCE. In January 1994, the RWQCB named Lockheed as the responsible party to investigate and clean up the TCE. This plume is located upgradient of the San Bernardino area in the Bunker Hill Basin and has been observed to be migrating toward the west.

2.3.3. Well Construction Standards

Well construction standards are desirable to prevent contamination from moving up or down well casings that have been constructed in the groundwater basin. Pursuant to guidelines from the California Department of Water Resources (DWR), the County of San Bernardino has adopted Ordinance 3105, which provides criteria for proper well construction, reconstruction, abandonment, or destruction. The San Bernardino County Department of Environmental Health Services administers this program.

2.3.4. Wellhead Protection Areas

The 1986 federal Safe Drinking Water Act required each state to develop a wellhead protection plan to describe how areas around wells will be protected from potential contamination. A major element of a wellhead protection program is the determination of protection zones around public supply wellheads. Within these zones, potential protection measures could include limitations on land uses to preclude industrial or agricultural uses with the potential to result in spills of chemicals or overuse of fertilizers and other chemicals. The District has been active in helping local water systems assess the current level of wellhead protection for each of their municipal wells, in association with the Drinking Water Source Assessment Program (San Bernardino Valley Water Conservation District 2004). Groundwater recharge areas are also sensitive and critical land areas to be protected, because water and contaminants can move downward to the groundwater within recharge areas.

3. GROUNDWATER BASIN MANAGEMENT

The Bunker Hill basin is home to irrigated agriculture, mining, cities, large industrial sites, and sensitive habitats. Numerous agencies are involved directly in water management, including the cities of Colton, Loma Linda, Redlands, Rialto, Riverside, and San Bernardino and water districts such as San Bernardino Valley Municipal, East Valley, Western Municipal, West San Bernardino County, and Yucaipa Valley. As a result, effective management of the Bunker Hill basin requires inter-agency communication and broad community involvement. The waters of the Santa Ana River are used by a variety of public and private entities for a number of beneficial uses. As a result, water management activities, such as groundwater recharge activities and management practices by the District and others, must be undertaken in a manner that meets these multiple needs, and minimizes harm to the environment. The District has historically pursued groundwater management activities to accommodate these multiple objectives. The recharge guidelines provided in this section of the PERC are designed to further optimize the benefits from the District's groundwater recharge activities, by updating the guidelines and standards for the District's recharge activities.

3.1. EXISTING MANAGEMENT EFFORTS

The District is one of many entities working together to manage groundwater in the Bunker Hill basin. Groundwater management is a collaborative effort through various agreements and judgments. Entities involved include:

- San Bernardino Valley Water Conservation District
- Upper Santa Ana Water Resources Association
- San Bernardino Valley Municipal Water District ("Muni")
- East Valley Water District
- Western Municipal Water District
- West San Bernardino County Water District
- Yucaipa Valley Water District
- Agua Mansa-Meeks and Daley Water Company
- Bear Valley Mutual Water Company
- Riverside-Highland Water Company
- Elsinore Valley Municipal Water District
- Cities of Colton, Loma Linda, Highland, Grand Terrace, Redlands, Rialto, Riverside, and San Bernardino

Basin adjudications provide the basic operating framework for basin management in the Bunker Hill basin. Two Watermasters serve the Bunker Hill basin. The Western-San Bernardino Watermaster, created in 1969 (Case No. 78426), prepares annual reports on groundwater extractions in the Bunker Hill and the downstream Riverside and Colton groundwater basins. The Big Bear Watermaster, established in 1977 (Case No. 165493), prepares annual reports that keep account of Big Bear Lake hydrologic conditions and conditions downstream of the lake in Bear Creek and Santa Ana River.

The District is often considered a neutral third-party as it relates to water, based on its unique position as neither water wholesaler nor retailer, and has been given responsibilities commensurate with that role. For example, the District provides one of three persons who serve as the Big Bear Watermaster. In addition, the District serves as "honest broker" among the ten public and private water agencies of the Santa Ana River-Mill Creek Cooperative Water Project, to facilitate transfers and exchanges of water among the members.

The District's operations contribute toward a more stable and sustainable water supply by maximizing the beneficial use of available native waters, thereby reducing the need for importation of water, and improving the quality of groundwater in the area. The District documents its groundwater management efforts and hydrologic conditions of the Bunker Hill basin in its annual engineering investigation reports (SBVWCD, 1993-2002). These annual reports present groundwater contour maps, well hydrographs, changes in storage, groundwater production, estimates of surface water and groundwater needed to replenish supplies in the coming year, and surface water and groundwater quality. These annual reports have been produced since 1993.

A variety of projects have been developed to promote groundwater management in the basin. These include the Cooperative Water Management Project, the High Groundwater Mitigation Project, the Drinking Water Source Assessment, the Drought Management Recharge Project, and Hydrogeologic Studies to Support Recharge Activities. The District recognizes that these related activities must be taken into account when regional management of groundwater levels is addressed. The projects are briefly discussed below.

Cooperative Water Management Project – The District is the project manager for the Cooperative Water Management Project (sometimes called the "Exchange Plan"), which manages transfers and exchanges of water among ten public and private water agencies. The District has served in this role since 1976 and, as part of its duties, provides a Daily Flow Report that tracks the water in the system.

High Groundwater Mitigation Project – The District is currently participating in a Pilot Dewatering Program ("PDP") to manage high groundwater levels in the vicinity of the City of San Bernardino by increasing well pumping capacity. The groundwater at the west end of the Bunker Hill basin is under pressure (confined), and accordingly the area is called the pressure zone. The purpose of the program is to lower the water table to a minimum of 15 feet below ground surface by pumping a maximum of 25,000 acre feet per year ("AF/yr") from shallow wells (Webb Associates, 1998). It was anticipated initially that this effort would eliminate near-surface flooding and lessen damage and injury during an earthquake.

The effectiveness of PDP pumping has not been determined for several reasons: 1) the total volume of water pumped has only been a fraction of the anticipated amount due to

a number of institutional and operational issues, 2) drought has reduced basin-wide recharge, and 3) other normal pumping has lowered water levels. However, the PDP has been beneficial in identifying the many institutional issues that are involved in the effort to manage high groundwater levels through increased pumping. Future plans for this program include increased pumping and a proposal to lower the water table to 30 feet below ground surface to gather data crucial to the future management of the basin. Additional detail on the PDP is presented in Section 3.2.2.

Drinking Water Source Assessment – The EPA has mandated that sources of drinking water be assessed for vulnerability to contamination. The Drinking Water and Environmental Management Division of the California Department of Health Services (DHS) is the lead agency for developing and implementing the Drinking Water Source Assessment Program in California. The District, in association with the Upper Santa Ana Water Resources Association, contracted with several participating agencies to perform this vulnerability assessment on their wells. The District has conducted source water assessments on more than 260 wells (San Bernardino Valley Water Conservation District 2004).

Drought Management Recharge Project – In 2002, in response to drought conditions, the Upper Santa Ana Water Resources Association (which includes most of the San Bernardino valley water supply agencies) approached Muni and the District for assistance in enhancing basin water supply. After several meetings and workshops Muni, a State water contractor, made State Water Project ("SWP") water available to valley municipal and local water agencies for groundwater replenishment at a greatly reduced price. Muni reduced the price of the water by 50 percent and the District offered $400,000 cost sharing to the water agencies within their boundaries, and made the use of its groundwater recharge facilities available at no cost.

Almost 15,000 acre-feet of SWP water were recharged under this project between September and December 2002. The participating agencies and the District conducted an intensive effort of data collection, much of it on a daily basis. Collected data included rates and volumes of water recharged, location and size of recharge facilities, depth of water in basins, groundwater levels downgradient of the recharge basins, and groundwater production.

Groundwater levels still remained low following this project, and various water agencies in 2003 again asked for assistance from the District in purchasing and recharging SWP water. The District has pledged $240,000 towards cost sharing in the purchase of SWP water, and has again opened its recharge facilities for this use.

Hydrogeologic Studies to Support Recharge Activities – One project, funded by the District, entails installation of several shallow monitoring wells or pits in the Seven Oaks Dam Borrow Site, and the evaluation of data from these wells. Data from this

investigation will help define the capacity of replacement facilities and assess the effects of recharge on local groundwater levels. The project began in fall 2002.

As noted above, the District in 2003 was awarded by DWR a $230,000 grant under Assembly Bill 303 (Local Groundwater Management Assistance Act of 2000). The grant funding is for a hydrogeologic investigation involving the drilling, installation, testing, and sampling of two 400-foot-deep groundwater monitoring wells just downstream of the District's Santa Ana River and Mill Creek recharge facilities. Pumping tests of the wells will provide data on aquifer characteristics that will allow the District to better evaluate the impacts of its recharge operations on groundwater levels and flow. Water quality sampling and analysis, including measurement of the naturally occurring stable isotopes of water (18O/16O and deuterium), will be used to determine the pathway of Santa Ana River recharge water in the groundwater system and will also help document the locally improving groundwater quality. Water level and quality data will fill important gaps in the current monitoring network and will also assist the District in understanding groundwater flow patterns and the effects of recharge. The project includes public education and stakeholder outreach and a final report to be submitted to DWR. This project has been scheduled to begin in early 2004.

At the time of this document's preparation, the U.S. Geological Survey, in coordination with Muni, is preparing a computerized model of the Bunker Hill basin. This model is expected to combine a number of elements: (1) a surface water model of flows in the creeks and rivers flowing in the basin; (2) a groundwater model of the flow and level of surface water; and (3) an "optimization model" comparing costs and benefits of various scenarios to reduce high groundwater levels near downtown San Bernardino. The computer model, when complete, is anticipated to assist public entities to predict the effects of various pumping and recharge activities, and may be an important tool for a basin-wide management plan.

3.2. FUTURE GROUNDWATER BASIN MANAGEMENT

A number of entities and individuals – along with variable precipitation and the increasing population that uses water – currently affect groundwater levels in the groundwater basin, either directly or indirectly. It is beyond the scope of this document to detail the operations of all individuals or entities. However, it should be recognized that the District is only one of a number of participants whose actions (together with factors beyond their individual or collective control) determine the amount of water in the local groundwater basin.

A significant challenge to water managers in the San Bernardino Valley is to balance groundwater levels in different parts of the Bunker Hill Basin. The subsurface aquifer slopes from the east, where the District's percolation basins are located, downward to the west, and water migrates in that direction. An important water management issue is maintenance of groundwater levels at adequate depths below ground surface in the

pressure zone located within the City of San Bernardino and immediately upstream of the San Jacinto fault, which forms the western boundary of the basin. Historically, the water table intersected ground surface in this area, causing groundwater to rise above ground surface in low-lying areas. Groundwater pumping and drought lowered the water table for several decades until the end of the 1960s, during which time the land had become occupied by commercial and residential development. Above-average rainfall and increased natural and artificial recharge of groundwater then led groundwater levels to rise again. By 1979, the groundwater was alleged to have entered the basements of certain buildings in this area. The high-groundwater problem was alleviated by the drought beginning in 1986 and extending into the 1990s. However, concerns over high-groundwater conditions in the San Bernardino area persist because of the associated potential for both flooding and the liquefaction of soils in the event of a major earthquake, which could lead to damage of buildings and infrastructure. A cooperative effort among agencies is needed to balance the need for higher groundwater levels in the east, which are generally achieved through recharge, and the need for lower water levels in the west, which are generally achieved through pumping.

Much of the high-groundwater condition in the western part of the basin evolves as a matter of timing. During years of near-normal or below-normal rainfall, pumping of groundwater, particularly in the urbanized central and western portions of the basin, equals or exceeds total recharge from all sources. However, in wet years, and especially a series of such years, increased precipitation rates result in high volumes of natural recharge. At the same time, basin recharge rates tend to increase because of the availability of above-average streamflow.

One goal of the PERC is to maintain appropriate water levels in the city to prevent flooding and to reduce the potential for damage from liquefaction caused by earthquakes. Thus, there is a need to control downgradient groundwater levels even though upgradient recharge is a highly variable function of annual streamflow. Because the District does not own or operate production wells, its individual contribution to management of high groundwater must be limited to reducing artificial recharge during periods of high groundwater levels and attempting to assist regional, coordinated solutions. Data indicate that the District's recharge contributes only incrementally to the high groundwater problem when considered in the context of all water recharged (contributions depend on the locations of recharge basins in relation to the pressure zone, as well as amounts recharged. Nonetheless, the District has formalized an operating plan to limit, through the PERC, its groundwater recharge during periods of high water levels.

3.2.1. Groundwater Relationships

Groundwater tends to flow from upgradient (i.e., areas to the north and east) to downgradient (i.e., the city area). It follows, therefore, that prediction of downgradient levels can be based in part on study of upgradient levels. With this concept in mind,

historical water levels from three representative groups of three wells each were compared to determine the extent of this relationship and the amount of lag time involved. The data were from the period of 1974 through 2001. The largest groundwater fluctuations occurred in upgradient wells, and depended on total annual recharge. Variations in downgradient well levels were of smaller magnitude. A time lag between upgradient and downgradient water levels of approximately four years was observed. Locations of the wells are shown in Figure 11, while average calendar year maximum water levels for the three groups of wells, expressed as vertical distance below ground surface, are shown in Figure 12.

Note in Figure 12 that average upgradient levels peaked at about only 23 feet below ground surface in 1979, as a result of above-average streamflow and recharge (see Figure 10). This upgradient peak was followed by downgradient wells reaching a critical average level of about only seven feet below ground surface, in 1984. During the subsequent drought the upper wells fell to an average of about 276 feet below ground surface in 1990, followed by the downgradient wells dropping to an average of about 90 feet below ground surface in 1994. Levels in the middle well group demonstrated intermediate responses that confirmed the effects of upgradient recharge.

Based on the observed time lag between upgradient and downgradient water levels of approximately four years, a program for managing District contributions to groundwater levels has been developed that entails:

- Quarterly review of groundwater conditions in the upper, middle, and lower areas;
- Determining whether groundwater levels are approaching critical levels; and
- Ascertaining whether District recharge should continue, stop, or enter a warning period in which groundwater conditions are reviewed and discussions undertaken with water users and other affected parties about cooperative actions that may be taken to address the situation.

3.2.2. Increased Production

Two basic solutions to the high-groundwater problem are to increase output from the basin or to limit input to the basin. The District is neither a wholesaler nor a retailer of water and does not operate any production wells in the basin. Accordingly, the PERC does not include specific actions to increase well production when water levels rise above critical levels in the City of San Bernardino area.

Increased production will likely become an important element of future water management because of population growth and the resulting increase in demand. A recent master plan for its water supply facilities in the basin was commissioned by San Bernardino Valley Municipal Water District (Camp Dresser & McKee 1995), and future municipal demands in 20 to 40 years were estimated to far exceed anticipated reductions in agricultural demands, so much so that 120,000 acre-feet per year of

additional recharged water will be required. It is reasonably foreseeable that basin pumping will increase in the future, and that recharge would need to increase concomitantly.

The proposed Riverside-Corona Feeder pipeline may lead to increased production in the more immediate future. This project would consist of the installation of groundwater production wells and a major feeder pipeline capable of delivering 40,000 acre-feet per year of groundwater from the Bunker Hill Basin to water purveyors served by Western Municipal Water District. The purpose of the project is to reduce dependence on direct delivery of imported water and thereby contribute to the self-sufficiency of the upper Santa Ana River watershed during dry-year conditions. Approximately 20 wells would be installed in the pressure zone, and 28 miles of pipeline would be constructed.

Pumping Effects on Groundwater Levels

A modeling study conducted by the USGS (Hardt and Freckleton 1987) evaluated the effects of recharge and pumping on groundwater levels in the San Bernardino area. Constant supplemental pumping rates from hypothetical wells within the confined zone were built into the model. A pumping rate of 5,000 acre-feet per year (AFY) for three years produced a modeled water-level decline of 7–15 feet in the pressure zone. For an increased pumping rate of 25,000 AFY for three years, the model projected declines of 40– 80 feet in the pressure zone. These results demonstrated that increased pumping could be an effective measure to reduce high groundwater levels.

A more recent field investigation of the increased groundwater pumping concept has also provided useful information for potential future applications. As described above, the PDP, involving several local water agencies, was initiated in 1998 to address high groundwater levels in the San Bernardino city area. The purpose of the program was to lower the water table to a minimum of 15 feet below ground surface by pumping a maximum of 25,000 AF/yr from shallow wells (Webb Associates, 1998). It was anticipated that this effort would eliminate near-surface flooding and lessen damage and injury during an earthquake.

Due to the lack of available water for blending, as of the time of preparation of this document, pumped water is being discharged only downstream near the Mission Street bridge. As noted previously, the effectiveness of PDP pumping has not been determined for several reasons, but the program has been beneficial in identifying the many institutional issues that are involved in an effort to increase pumping to manage high groundwater levels.

3.2.3. Limiting Groundwater Recharge

The second possible method to reduce high groundwater levels involves limiting artificial groundwater recharge. Pertinent to this concept is a study done by the USGS using the computer model referred to above. The study focused on relative contributions that various artificial recharge facilities made to water level rises in the city

area. To evaluate the effects of recharge, the study focused on relative contributions that various artificial recharge facilities made to water level rises in the confined area. Simulated results demonstrated that artificial recharge in the Waterman Canyon-East Twin Creek area had the most effect volumetrically on the high-water zone, presumably because it is the closest of all major recharge sources. To produce a one-foot rise in water level after 10 years near the center of the confined area, one of the following volumes of recharge was determined to be required: 3,400 AFY in Waterman Canyon-East Twin Creek; 7,700 AFY in the Santa Ana River; or 7,500 AFY in Lytle Creek (Hardt and Freckleton 1987). Thus, a unit volume of recharge in the Waterman Canyon-East Twin Creek recharge area has an effect on water levels in the center of the pressure zone that is 226% of the effect produced by a unit volume of recharge in the District recharge basins and 220% of the effect of a unit volume of recharge in Lytle Creek. These findings make clear that a factor in the high groundwater problem is uncoordinated recharge activities across the basin. It follows that a coordinated effort by all water agencies becomes essential if the artificial recharge component of the high groundwater problem is to be managed.

An analysis to illustrate the effect of recharge, natural and artificial, on downgradient groundwater levels is discussed below. First, annual values of Santa Ana River flows and District recharge are shown in Figure 10. Three consecutive years, 1978-1980, yielded river flows well above average and, correspondingly, the District diverted large quantities of water for artificial recharge during this period. Second, Figure 11 shows locations of three sets of three wells each: one near the recharge area, one in the vicinity of the pressure area of the city, and one midway in between. Lastly, available annual data for the maximum average depths to groundwater in the three sets of wells are plotted in Figure 12 (this figure shows the groundwater levels closest to ground surface). A review of Figure 12 shows that the water table approached the ground surface in the lower city area in the early 1980s, resulting in the high groundwater problem described previously. This high water table was a problem in fewer than three of the 28 years graphed.

Figure 12 also reveals the spatial and temporal development of the high groundwater problem. Beginning after the drought of 1976–1977, a series of high rainfall years caused groundwater levels to rise an average of 170 feet near the recharge basins, 120 feet in the middle area, and 100 feet in the lower area over the next four to seven years. Thus, a rise in the water table migrated slowly westward down the valley. The upgradient wells were influenced by the river and the recharge basins, midway wells were influenced by the same sources and inflows from Plunge and City creeks, and lower area wells responded to all of these plus inputs from Lytle Creek and other northern sources.

Groundwater levels in the upgradient wells rose some 110 feet in 1978, but rose relatively little in the following two years, despite continued high streamflow and recharge. The subsequent drought of the late 1980s into the early 1990s created a

decline of some 240 feet from the highs of the late 1970s as both streamflow and concurrent recharge fell to minimal values. Average upgradient levels peaked at about 23 feet below ground surface in 1979, as a result of above-average streamflow and recharge. This upgradient peak was followed by downgradient wells reaching a critical average level of about only seven feet below ground surface, in 1984. Similarly, during the subsequent drought, the upper wells fell to an average of about 276 feet below ground surface in 1990, followed by the downgradient wells dropping to an average of about 90 feet below ground surface in 1994. Levels in the middle well group demonstrated intermediate responses that confirmed the effects of upgradient recharge. Upgradient levels returned to a high in 1993 almost equivalent to those 14 years earlier, yet downgradient levels did not respond as strongly this time. This difference can be attributed to the fact that wet years did not occur consecutively as they had earlier. The time intervals between high flows apparently enabled upgradient mounding of the water table to dissipate gradually, so that downgradient responses were diminished.

One approach to predicting downgradient levels is to review upgradient fluctuations. In other words, one would look at the average water levels in select sub-areas, and establish "safe" or maximum desirable groundwater levels to protect against high groundwater problems. Basin inputs such as recharge, outflows such as groundwater production, and available storage space would be reflected in the existing groundwater depths. By anticipating the lag between recharge in the upper end of the basin and groundwater response at the lower end, artificial recharge can be reduced when groundwater elevations in the upper area, middle area, and/or pressure zone approach maximum values established for each area. This method is used in the PERC.

3.2.4. District Actions

District facilities and operations will continue to be those described in Section 1.4 of this document. The District will take the following actions:

Recharge in an amount not to exceed 65,864 AF/yr.

The District will recharge native Santa Ana River and Mill Creek water from existing diversion points in an amount not to exceed 65,864 acre-feet in any given water year. The maximum quantity to be diverted from the existing diversion work in the Santa Ana River is 52,172 AF/yr. The maximum quantity to be diverted from the District's existing diversion work at Mill Creek is 19,800 AF/yr. These amounts correspond to the maximum annual amounts diverted from each system since 1969.

Maintain standard diversion and recharge practices.

The District will divert Santa Ana River and Mill Creek water consistent with its historical operation practices, as described in Section 1.4 of this document.

Monitor and, on a quarterly basis, report on groundwater level trends in the Bunker Hill Basin.

The District will supplement its current annual Engineering Investigation of the Bunker Hill Basin with additional quarterly reports on groundwater trends in the Bunker Hill Basin. The monitoring reports will include an evaluation of the inputs and outputs that affect water levels in the basin, with the goal of determining potential trends in changing groundwater levels. Factors described below will be included in the evaluation.

Precipitation
Precipitation gauges used in the District's annual Engineering Investigation of the Bunker Hill Basin are well distributed throughout the land overlying the Bunker Hill basin, and are considered to be adequate to determine temporal precipitation trends in the valley. These data are collected daily and are summarized into monthly and annual totals by San Bernardino County Flood Control District. While precipitation in the mountain areas has an effect on groundwater levels in the valley, this effect is typically felt through natural recharge of increased streamflow.

Streamflow
A variety of USGS streamflow gauges exist on most of the significant streams entering the valley. Data are produced from these gauges daily and are summarized into monthly and annual totals by USGS. Mill Creek, one of the more significantly flowing streams in the valley, is currently estimated based on a flat percentage of the flow in the Santa Ana River. Placing a gauge on Mill Creek would significantly improve the estimate of flow in that stream, and potentially lead to a more precise understanding of inputs of water to this valley.

The Santa Ana River has a USGS streamflow gauge at E Street, shortly before the stream exits the valley overlying the Bunker Hill basin. This gauge is downstream of the City of San Bernardino wastewater discharge point (no longer being used due to water quality standards), and upstream of the confluence with Lytle Creek.

Imported Water
Imported water is typically transported into the basin from the State Water Project, through the San Bernardino Valley Municipal Water District ("Muni"). This imported water is used for consumption purposes or for recharge into the Bunker Hill basin.

These data are best obtained from Muni, as any water imported into the basin is likely to use Muni's facilities.

Production
Production – including both groundwater pumping and diversion of surface water for consumption – is the single largest output from the groundwater basin. The District's Engineering Investigation of the Bunker Hill Basin examines annual production for all water users in the basin.

Water exported from the basin includes production of both groundwater and surface water. A certain portion of production normally returns to the basin in the form of recharge – wastewater, agricultural, and others. While exported water does not have a similar "return factor," trends in groundwater levels can still be predicted without differentiating production for export from the general production of water from the basin.

Implementation
The above-described data will be assembled monthly and evaluated quarterly by the District. This program of data collection and analysis is designed primarily to aid the District in determining its operations during the "warning" periods designated in the PERC. It is possible that analyzing these data might present the District with additional criteria that would suggest a change in state be triggered as per the PERC. For example, certain input variables above a certain level might automatically trigger a "warning" period.

A brief report of the data, the evaluation of those data, and the conclusions drawn from that evaluation will be prepared and offered to the local producers for their information. Also included in the report will be a report on the current status of the decision matrix, as described in the PERC, based on the information reviewed in the report. The Upper Santa Ana Water Resources Association is an adequate vehicle to disseminate these quarterly reports and the information they contain.

Use the operating parameters specified in the matrix "Groundwater Depth Scenarios and PERC Operating Conditions" to guide recharge decisions.
The District will continue to divert Santa Ana River and Mill Creek water when groundwater levels are low (i.e., below critical depths, as described in the following). When groundwater levels start approaching established critical depths below ground surface, the District's recharge efforts will either stop or enter a warning and review period.

Table 4 is a matrix of groundwater depth conditions in the lower, middle, and upper areas represented by the three sets of wells in Figure 11. The matrix shows the groundwater depth conditions in the lower, middle, and upper areas that would trigger the following proposed District actions:

Continue recharging – This first set of scenarios consists of conditions when recharge is not expected to contribute to high groundwater levels downgradient and should therefore continue.

Warning to review data and modify recharge as needed – The second set of scenarios constitutes conditions of warning when hydrogeologic conditions would be reviewed and recharge operations modified as needed.

Stop recharging until water levels fall – This last set of scenarios consists of conditions when the District would stop recharging until water levels drop below the critical depths.

According to these criteria, the District would stop recharging if both the lower and middle areas have reached the critical groundwater depths or both the middle and upper areas have reached the critical depths, and would continue recharging if both the lower and middle areas have more storage space before reaching critical depths. When the lower area has reached the critical depth and the middle area has additional storage space, or when the middle area has reached the critical depth and the lower and upper areas have additional storage space, hydrogeologic conditions, such as past and anticipated natural and artificial recharge, pumping, and imported water use, would be reviewed to determine how much water can be recharged safely. Recharge may be modified or ceased at such a time.

For example, when average groundwater depths in the lower area are greater than 30 feet, average middle area groundwater depths are less than 50 feet, and average upper area groundwater depths are greater than 60 feet, recharge operations enter a condition of warning, data review, and possible modification to recharge activities. The high levels in the middle area will migrate to the lower area and could cause high groundwater problems if levels are elevated in the lower zone, if natural recharge is or will be high, and/or if groundwater production is or will be low. Under these conditions, the District's recharge activities may be reduced or stopped. Conversely, if groundwater levels are low in the lower area, recharge is low, and/or groundwater production is high, then recharge might continue.

Under the warning criteria, hydrogeologic conditions would be reviewed and the District would hold discussions with water users and other affected parties and consider modifying recharge operations appropriately. The hydrogeologic conditions reviewed would include water-level trends in the three areas; use of imported water; past, current, and projected pumping; inflow from upper areas; Seven Oaks Dam releases; and other relevant information.

The matrix operating criteria presented in Table 4 can be applied to the historical water levels shown in Figure 12 to illustrate how prospective PERC criteria would have affected past recharge practices. The red, yellow, and green colored bar at the bottom of Figure 12 indicates operations of normal recharge, warning and review, and stop artificial recharging, respectively. The initial years of 1974 through 1977 would have been green, showing no limitation on recharge in any of the three areas, with groundwater depths greater than 60 feet in the upper area, greater than 50 feet in the middle area, and greater than 30 feet in the lower area. The rise of more than 50 feet in groundwater depth in the upper area in 1978 would have triggered a yellow "warning" period. The year 1979 would have been in the green range, even though the depth to groundwater in the upper area was less than 60 feet, because the other two areas were below trigger levels, indicating that ample storage space remained. In the following

year (1980), both the upper and lower areas were above the critical depth, giving a red signal to stop recharge. The next year (1981) showed marked declines in the upper and middle areas, making it green. In 1982, the rise in water levels in the middle area and the upper area at the critical level of 60 feet would have led to a stop in recharge (red). In 1983, groundwater depths in the middle and lower areas would have triggered a warning condition. In 1984 and 1985, groundwater depth in the lower area was above 30 feet, keeping recharge in a warning condition. Recharge would have been in a green continuing condition between 1986 and 2001, with the exception of 1993. In 1993, groundwater levels in the upper area rose more than 50 feet, causing a warning in which basin conditions would have been reviewed.

District operations under the criteria described above will involve the following specific measures:

- Groundwater depths and elevations in key monitoring wells in the three areas would be measured at least quarterly and averaged;
- Data on groundwater production, imported water use, streamflow, and other basin hydrologic factors would be compiled and evaluated at least quarterly;
- Key wells and matrix criteria would be reviewed and revised when necessary to adapt to changing basin conditions; and
- When groundwater levels enter warning conditions shown in Table 4, the District would contact affected agencies and other interested parties and participate in an advisory committee to analyze past and current hydrogeologic conditions with a goal of recommending whether and when to reduce or stop recharge. The committee's recommendation would be provided to the District Board of Directors for consideration at the next scheduled Board meeting.

Much as minimum-depth-to-groundwater targets can be established to prevent high-groundwater problems, so too can maximum depths to groundwater be established to indicate potential problems with declining groundwater levels. Actions, such as the District's recent cost-sharing initiatives and purchase of State Water Project water, may be implemented to offset the effects of declining groundwater levels. The District will continue its practice of discussing these and other issues with affected agencies and other interested parties, with the goal being development of a cooperative basin-wide groundwater management plan.

Revise the PERC as needed to reflect new conditions.

The PERC will be adapted as appropriate over time to reflect both changing conditions and refined understanding of groundwater-level dynamics in the Bunker Hill Basin. Future growth in the basin will depend largely on increased groundwater recharge and pumping. The extent of the projected increase in pumping depends on many factors, including the amount of imported water available from the State Water Project, population growth rates, water conservation, use of recycled water, and changing precipitation patterns. These factors will make any decisions governing water levels, pumping, and recharge transitory and in need of continual revision.

3.2.5. Basin-Wide Cooperation

The high groundwater situation of the late 1970s and early 1980s occurred as the result of water inputs from all streams and recharge basins in the Bunker Hill Basin. It follows that management of groundwater levels is a basin-wide responsibility to be shared by all water entities. A coordinated effort involving both groundwater pumping and artificial recharge appears to be most feasible for ensuring that groundwater remains at appropriate levels in all parts of the basin. It is likely that conjunctive use of water and agreements between agencies in the basin will become even more prevalent in the future to facilitate more effective basin-wide management. For example, the proposed Riverside Corona Feeder Project anticipates storing local and imported water in this groundwater basin and then pumping some 40,000 acre-feet annually from the Bunker Hill Basin for use in western Riverside County (Webb Associates 2003). The water supply pumped from the pressure zone will be offset with other water, such as State Water Project water. Thus, more recharge at the upper end of the basin may be needed to compensate for increased groundwater production in the pressure zone.

The PERC provides a methodology that can guide an inter-agency consortium in protecting lives and property in San Bernardino while optimizing available groundwater resources. The District has already initiated discussions about the proposed PERC criteria with other water agencies and will continue to involve other water agencies and producers in the basin.

The District and other water users in the Upper Santa Ana River area have discussed a comprehensive plan to guide all water management activities in the area. While consensus on such a plan has not yet been reached, the District continues to work with other water agencies and users of the Upper Santa Ana River toward this goal. A cooperative plan for water management would reduce uncertainty over appropriate operations of Seven Oaks Dam and minimize conflicting claims to water rights among various parties. To date, however, no formal basin-wide management plan has been developed. Many smaller committees and agreements do exist that address specific concerns. Efforts will be made to expand one of the existing committees to become a regional basin-wide management committee with a goal of developing a regional water management plan.

4. GROUNDWATER CHARGE

The following is a summary of actions that shall be taken by the District annually for the determination by the Board of Directors in establishing the groundwater charge.

4.1. INVESTIGATION AND REPORT

The District shall annually produce an engineering report on the groundwater conditions of the District. The engineering investigation and report shall include all of the following:

- Information for the consideration by the Board in its determination of the annual basin change in storage;
- Information for the consideration by the Board in its determination of the accumulated change in storage as of the last day of the preceding water year[1];
- A report as to the total production of water from the groundwater supplies of the District for the preceding water year;
- An estimate of the annual basin change in storage for the current water year for the ensuing water year; and
- The amount of water the District is obligated to purchase during the ensuing water year, and a recommendation as to the quantity of water needed for surface delivery and for replenishment of the groundwater supplies of the District for the ensuing water year.

4.2. HEARING

On or before the day of the regular meeting of the Board of Directors in March of each year, the engineering investigation and report shall be delivered to the Secretary of the Board in writing.

The Secretary of the Board shall publish a notice of the receipt of the engineering investigation and report and of a public hearing thereon to be held in April. The notice shall be published, as required by law.

The notice, in addition to other information the District may provide, shall contain an invitation to all operators of producing wells within the District boundaries, to call at the office of the District to examine the engineering investigation and report.

The Board of Directors shall hold a public hearing in April of each year, in the regular place of the Board, but not sooner than 30 days after receipt of the engineering investigation and report, unless otherwise permitted by statute. Any operator of a producing well within the District boundaries, or any person interested in the condition of

[1] A water year shall mean from July 1st of one calendar year to June 30th of the following calendar year.

the groundwater or surface water supplies of the District, may in person or by representative appear and submit evidence at the public hearing concerning the groundwater conditions and the surface water supplies of the District. Appearances also may be made supporting or protesting the engineering investigation and report.

The Board of Directors shall, before levying of a groundwater charge, find and determine all of the following:

- The average annual basin change in storage for the immediate past ten water years;
- The estimated annual basin change in storage for the current water year;
- The estimated annual basin change in storage for the ensuing water year;
- The accumulated change in storage as of the last day of the preceding water year;
- The estimated accumulated change in storage as of the last day of the current water year;
- The estimated amount of agricultural water to be withdrawn from the groundwater supplies of the District for the ensuing water year;
- The amount of water other than agricultural water to be drawn from the groundwater supplies of the District for the ensuing water year;
- The estimated amount of water necessary for surface distribution for the ensuing water year;
- The amount of water which is necessary for the replenishment of the groundwater supplies of the District; and
- The amount of water the District is obligated by contract to purchase.

The findings and determinations by the Board of Directors shall be conclusive and binding upon all persons and parties.

4.3. LEVY OF CHARGE

Prior to the end of the water year in which the hearing is held, and based upon the findings and determinations from the hearing, the Board of Directors shall determine whether or not a zone or zones shall be established and a groundwater charge levied for the ensuing water year. A zone may include the entire District.

If the Board of Directors determines that a zone or zones should be established and a groundwater charge levied therein, it shall establish the zone or zones and levy the charge against all persons operating wells within the zone or zones during the ensuing water year.

The charge shall be computed at a fixed and uniform rate per acre-foot for agricultural water, and at a fixed and uniform rate per acre-foot for all water other than agricultural water.

Different rates may be established in different zones if the Board of Directors establishes zones instead of a District-wide zone; provided, however, that in each zone the rate for agricultural water shall be fixed and uniform and the rate for water other than agricultural water shall be fixed and uniform.

Any groundwater charge in any year shall be established at a fixed and uniform rate for each acre-foot for water other than agricultural water, which is not less than three times nor more than five times the fixed and uniform rate established for agricultural water, unless otherwise authorized by law.

4.4. COLLECTION

The District, after the levying of the groundwater charge, shall give notice thereof to each operator of a producing well in the zone or zones as disclosed by the records of the District, which notice shall state the rate for each class of water of the groundwater charge for each acre-foot of water to be produced during the ensuing water year. The notice shall be sent prepaid by the District.

After the establishment of a groundwater charge, each operator of a producing well within the affected zone or zones of the District shall file with the District, on or before the 31st day of January and on or before the 31st day of July in each year, a statement setting forth the total production in acre-feet of water for the preceding six-month period (excluding the month in which the statement is due), a general description or number locating each well and the method or basis of the computation of such water pumping.

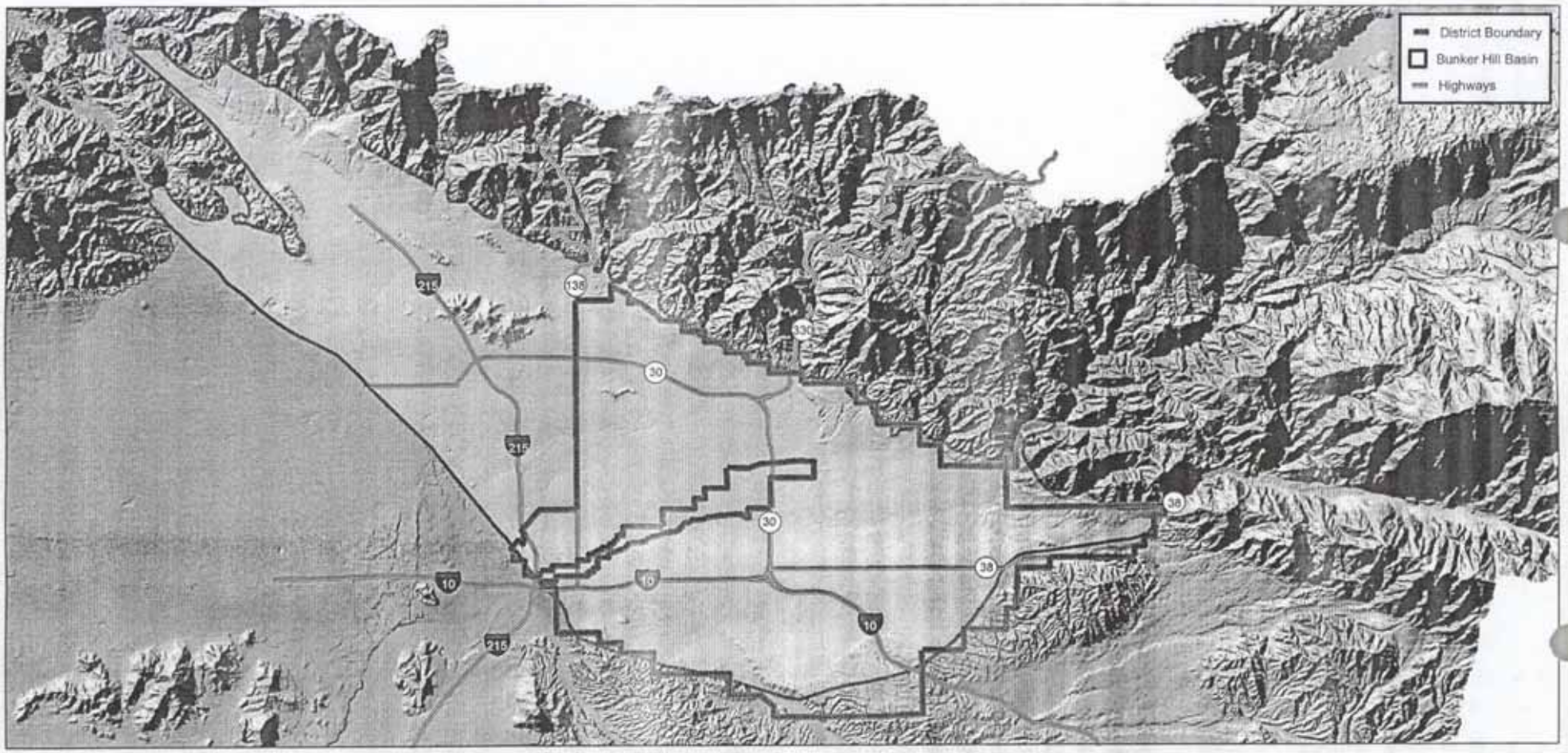
If no water has been pumped from a well during the preceding six-month period, a statement shall be filed with the District, setting forth that no water has been pumped during that period. Such statement shall be verified by a written declaration that it is made under penalty of perjury.

The groundwater charge is payable to the District on or before the last day upon which the water production statement is required to be filed and is computed by multiplying the production in acre-feet of water for each classification as disclosed in the statement by the groundwater charge for each classification of water.

Whenever any producing well in an affected zone is permanently abandoned, the operator thereof shall give written notice of such abandonment to the District.

If any operator of a producing well fails to pay the groundwater charge when due, the District shall charge interest at the rate of one percent (1%) each month on the delinquent amount of the groundwater charge.

If any operator of a producing well fails to register the well or fails to file the water production statements as required, the District shall, in addition to charging interest, assess a penalty charge against the operator in an amount of ten percent (10%) of the amount found by the District to be due.



California State Plane
NAD 83, Zone V, feet

Source: SBVWCD GIS
Created in ArcGIS

N
1 in = 12,000 ft

District Boundary

Program for Effective Recharge Coordination (June 2004)

Figure 01

California State Plane
NAD 83, Zone V, feet

Source: SBVWCD GIS
Created in ArcGIS

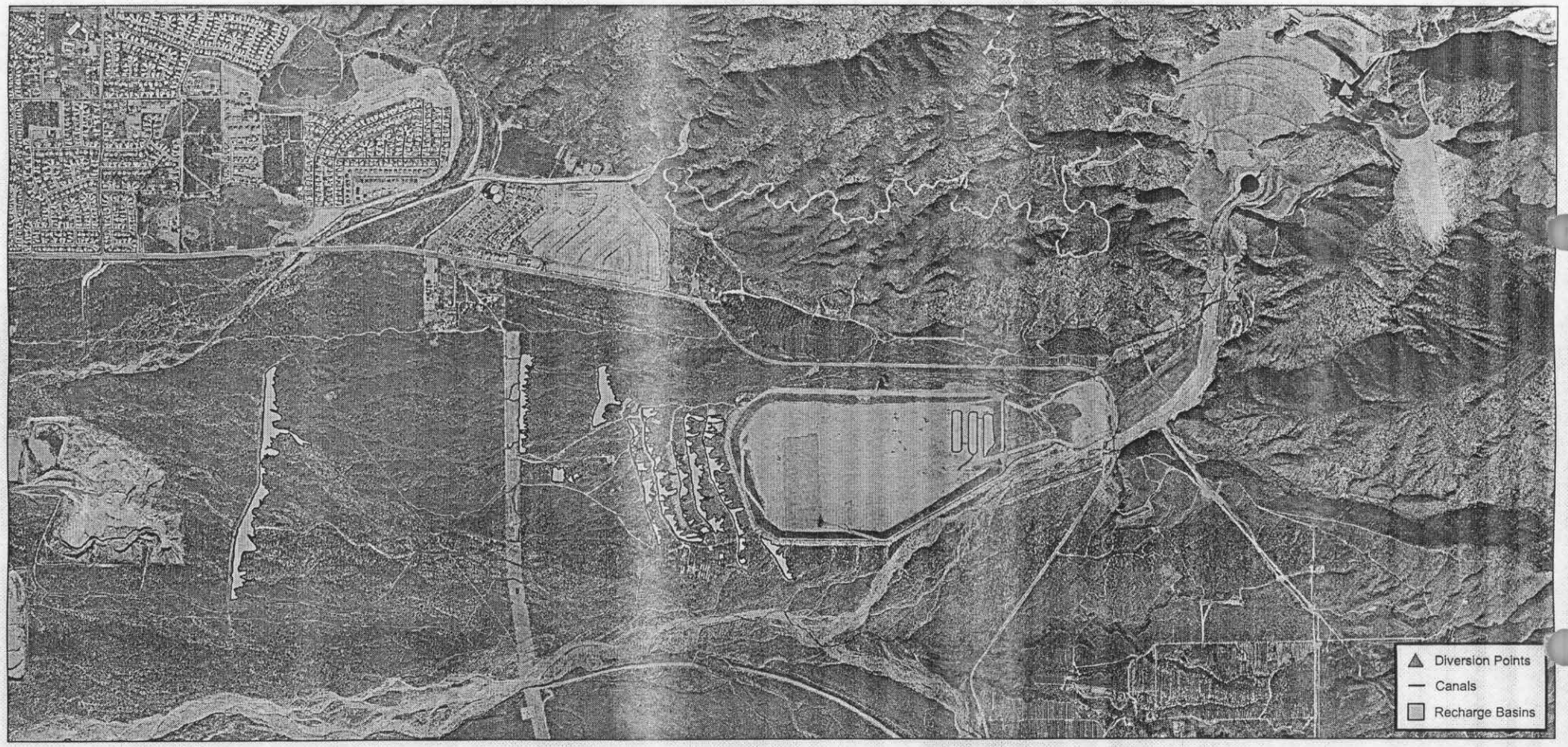
N
1 in = 2400 ft

District Recharge Facilities Overview

SBV WATER CONSERVATION DISTRICT
OUR NAME IS OUR MISSION

Program for Effective Recharge Coordination (June 2004)

Figure 02



California State Plane
NAD 83, Zone V, feet

Source: SBVWCD GIS
Created in ArcGIS

N
1 in = 1600 ft

District Santa Ana River Recharge Facilities

SBV WATER CONSERVATION DISTRICT
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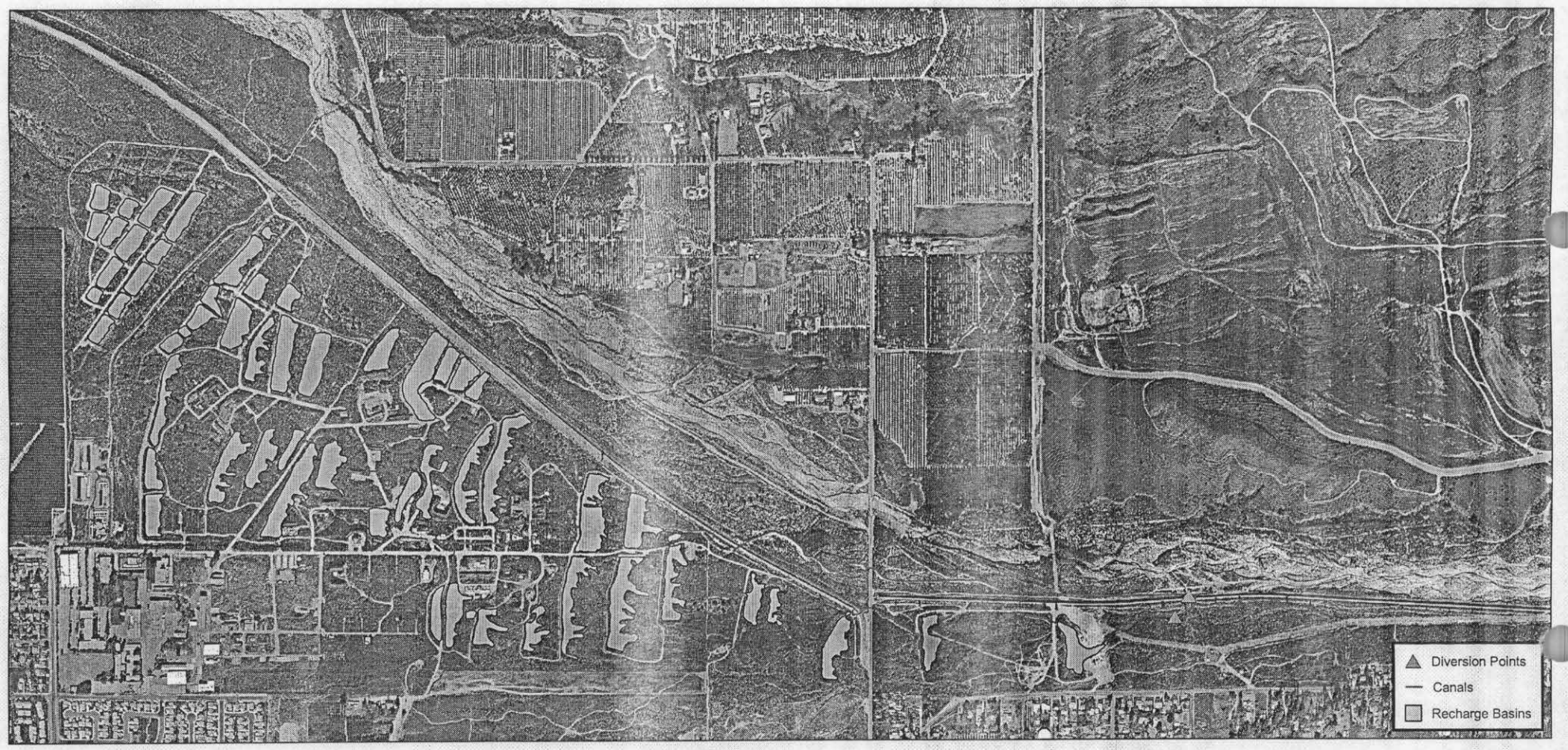
Program for Effective Recharge Coordination (June 2004)

Figure 03



California State Plane
NAD 83, Zone V, feet

Source: SBVWCD GIS
Created in ArcGIS

N
1 in = 800 ft

District Mill Creek Recharge Facilities

SBV WATER CONSERVATION DISTRICT
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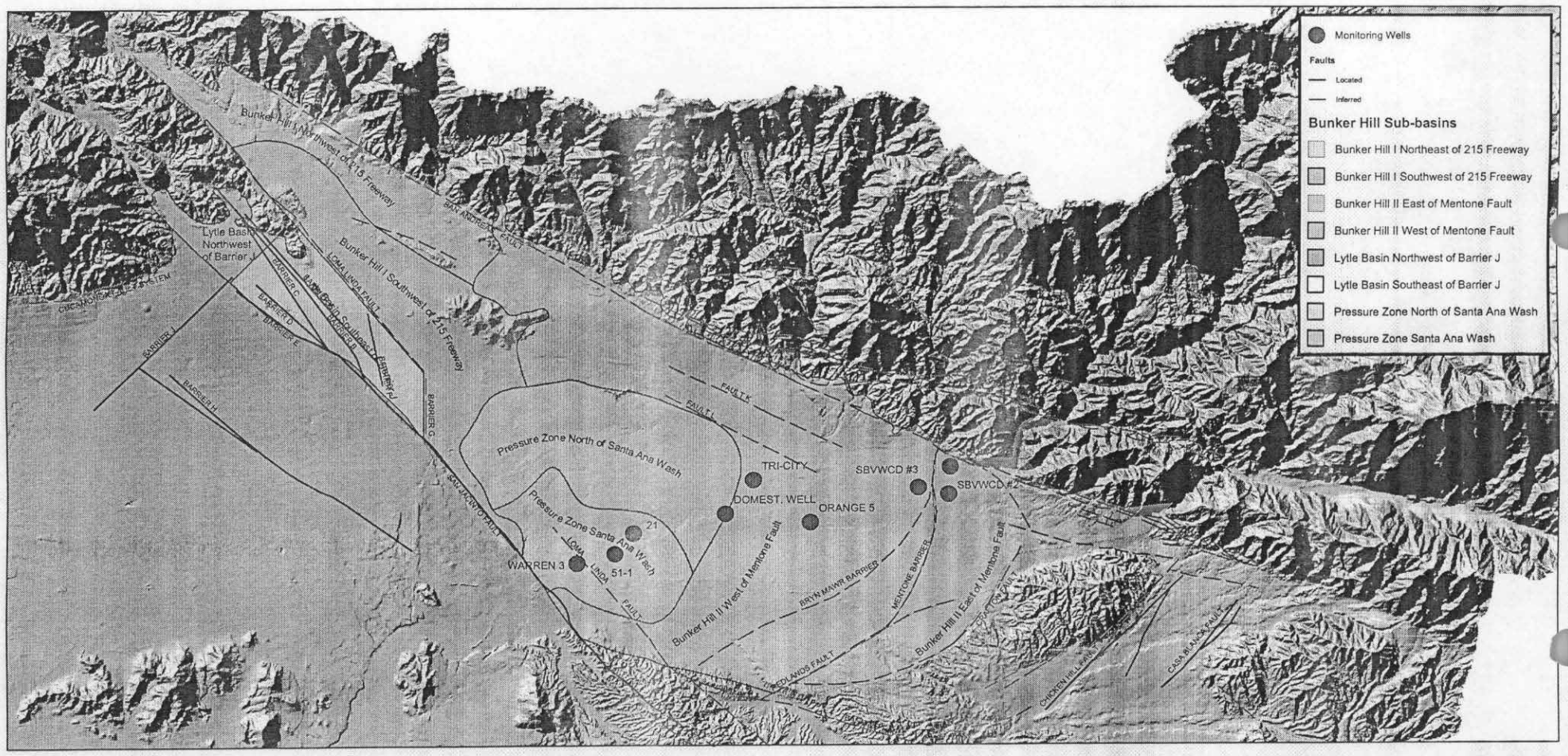
Program for Effective Recharge Coordination (June 2004)

Figure 04



California State Plane
NAD 83, Zone V, feet

Source: SBVWCD GIS
Created in ArcGIS

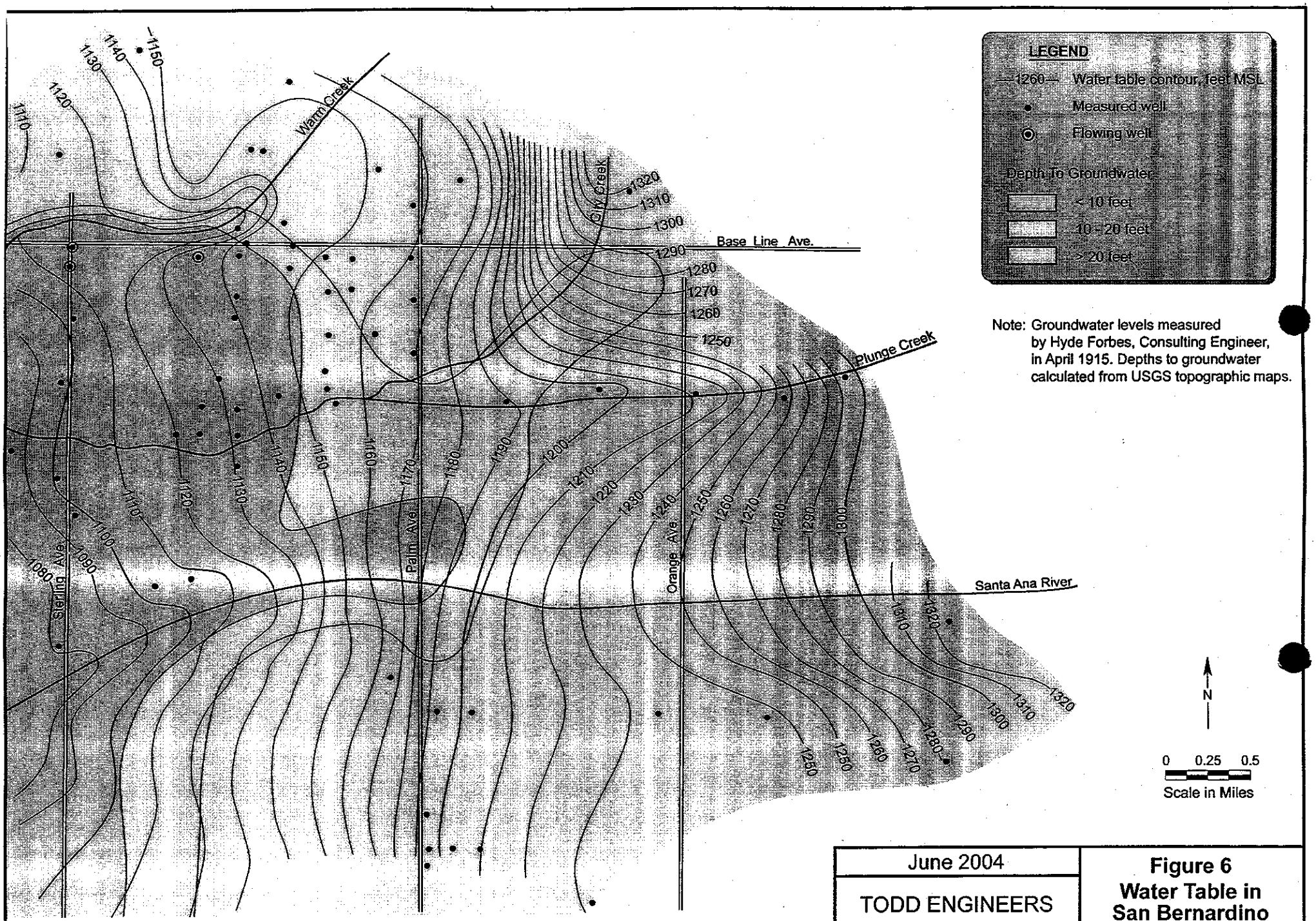
N
1 in = 12,000 ft

Bunker Hill Basin with Geologic Faults

SBV WATER CONSERVATION DISTRICT
OUR NAME IS OUR MISSION

Program for Effective
Recharge Coordination
(June 2004)

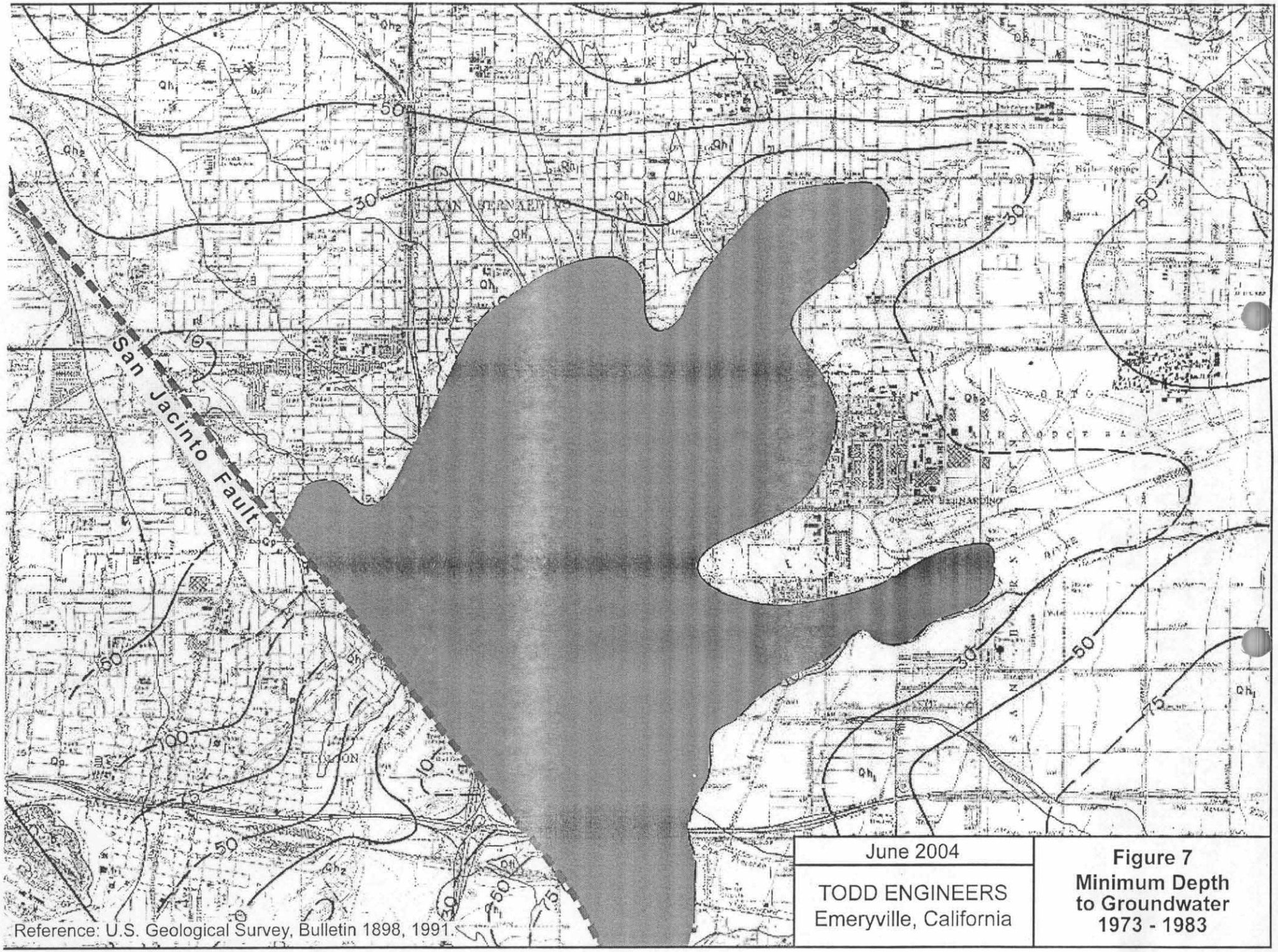
Figure 05



June 2004

TODD ENGINEERS
Emeryville, California

Figure 6
Water Table in San Bernardino April 1915

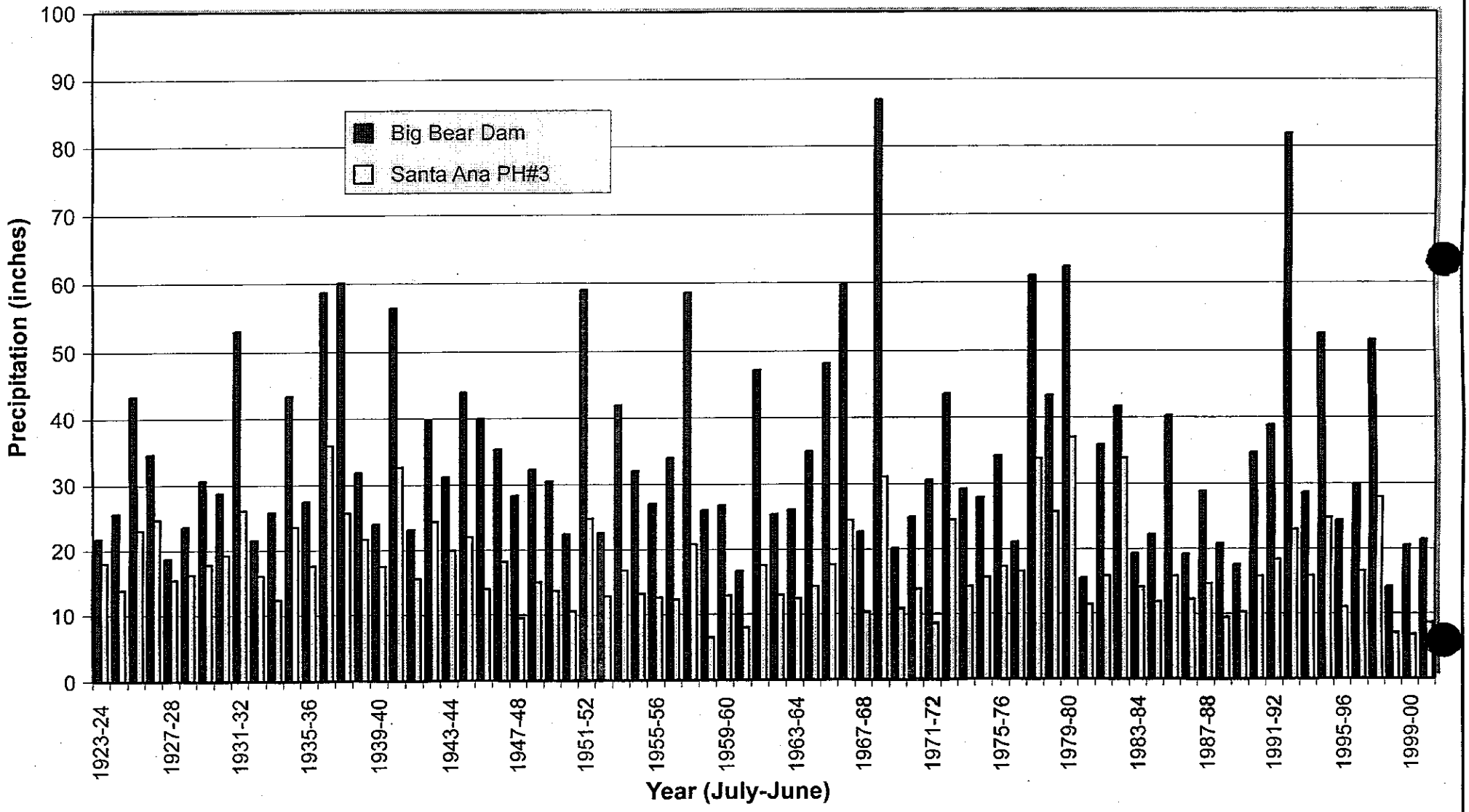


Reference: U.S. Geological Survey, Bulletin 1898, 1991.

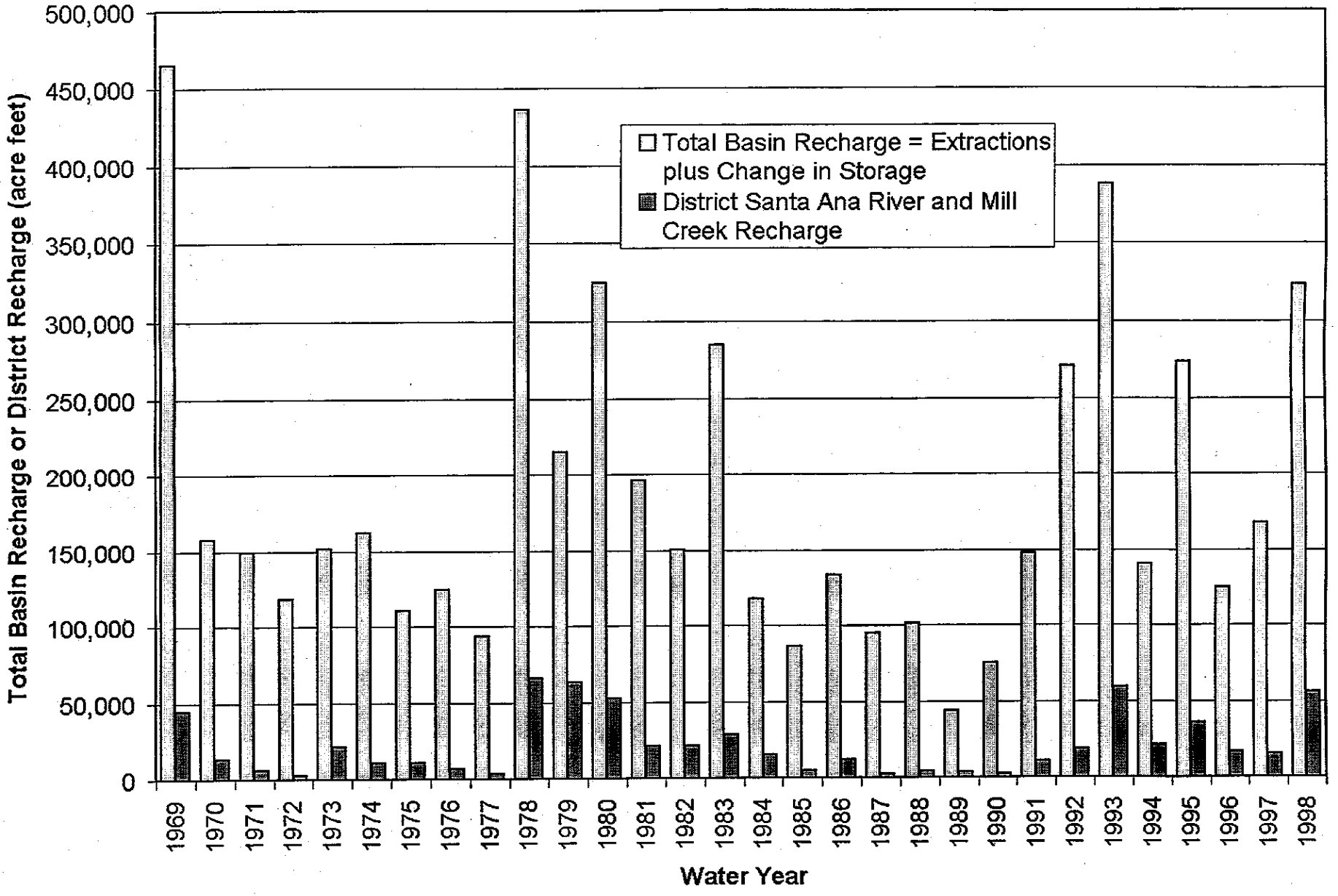
June 2004

TODD ENGINEERS
Emeryville, California

Figure 7
Minimum Depth to Groundwater 1973 - 1983

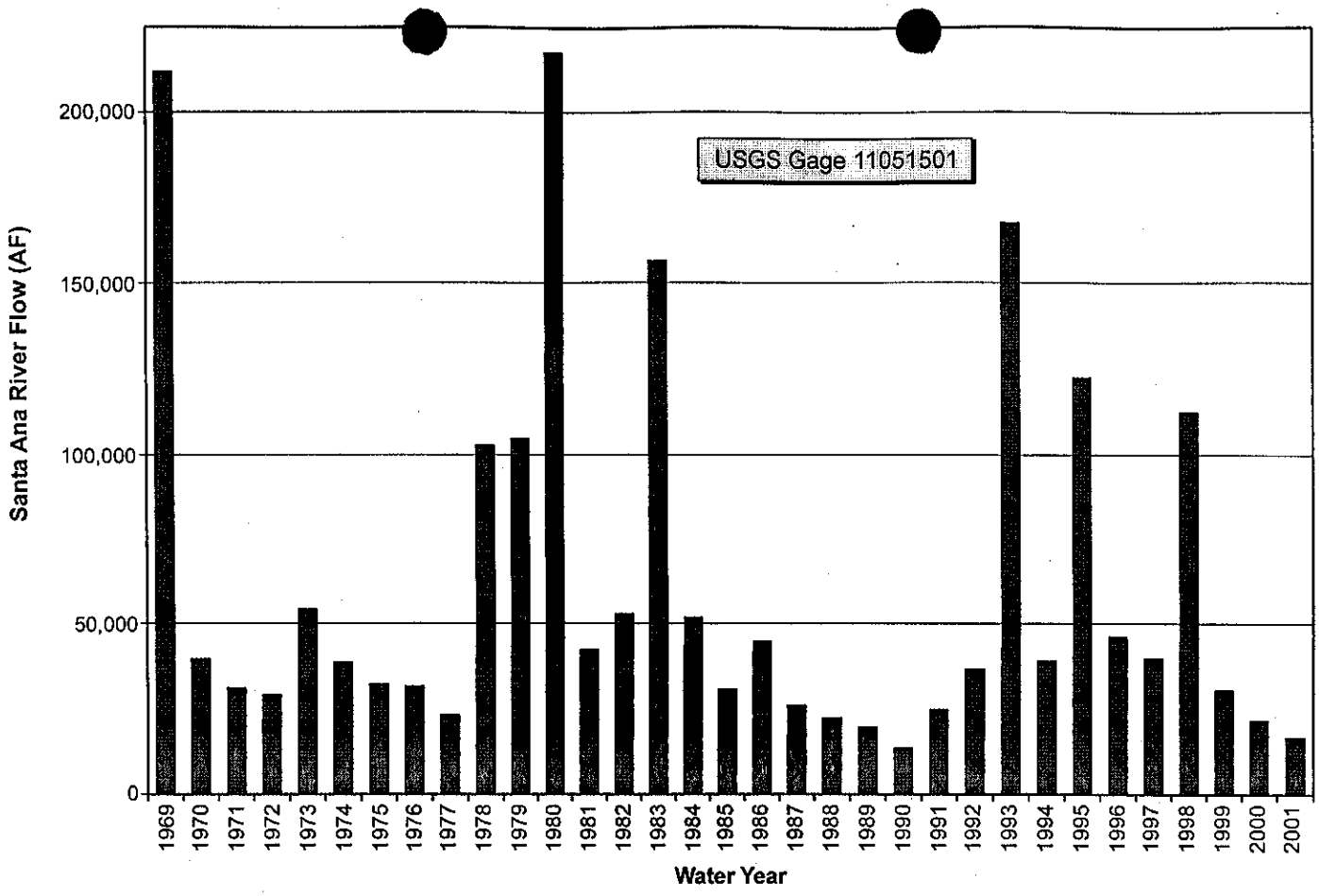


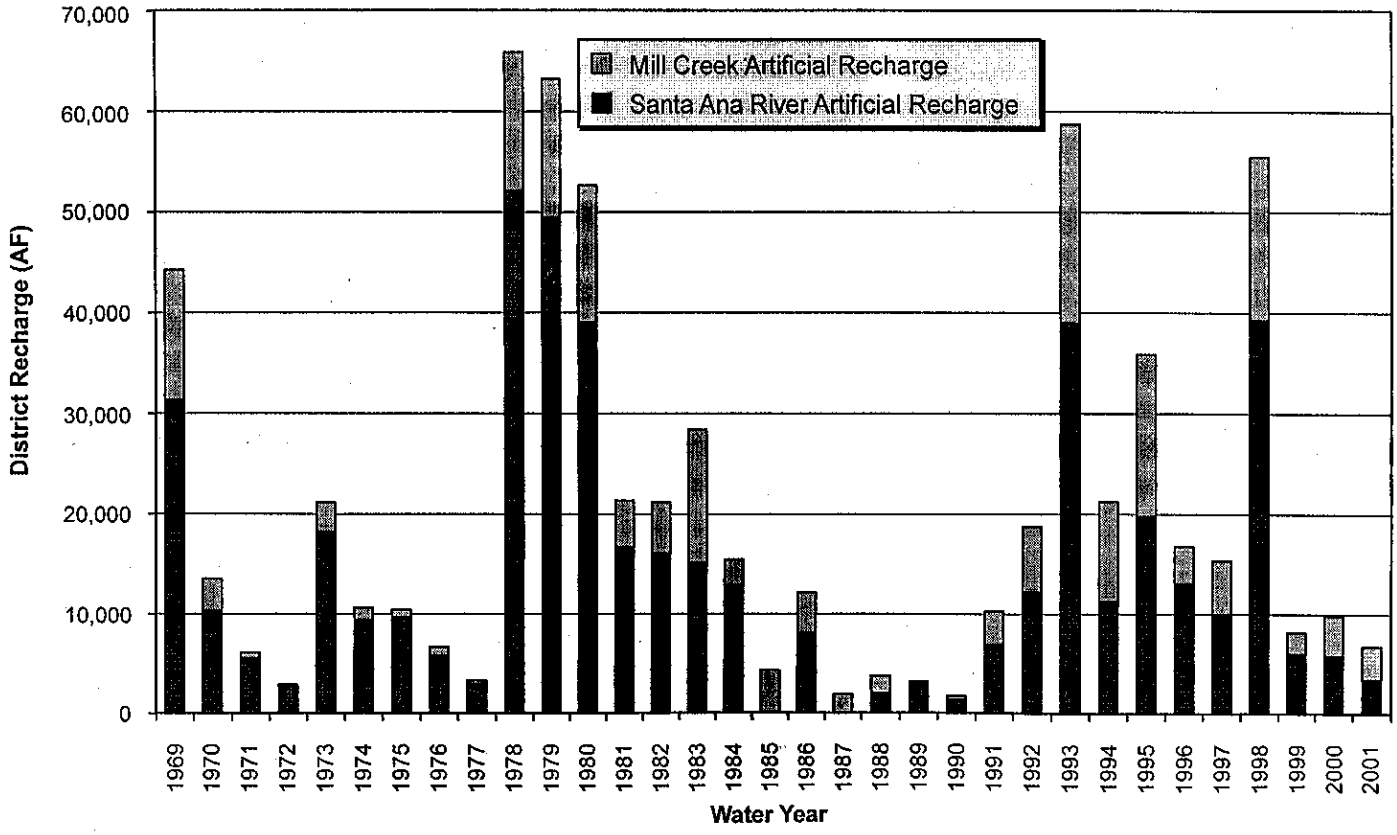
June 2004	**Figure 8**
TODD ENGINEERS Emeryville, California	**Precipitation Draining to Bunker Hill Basin**



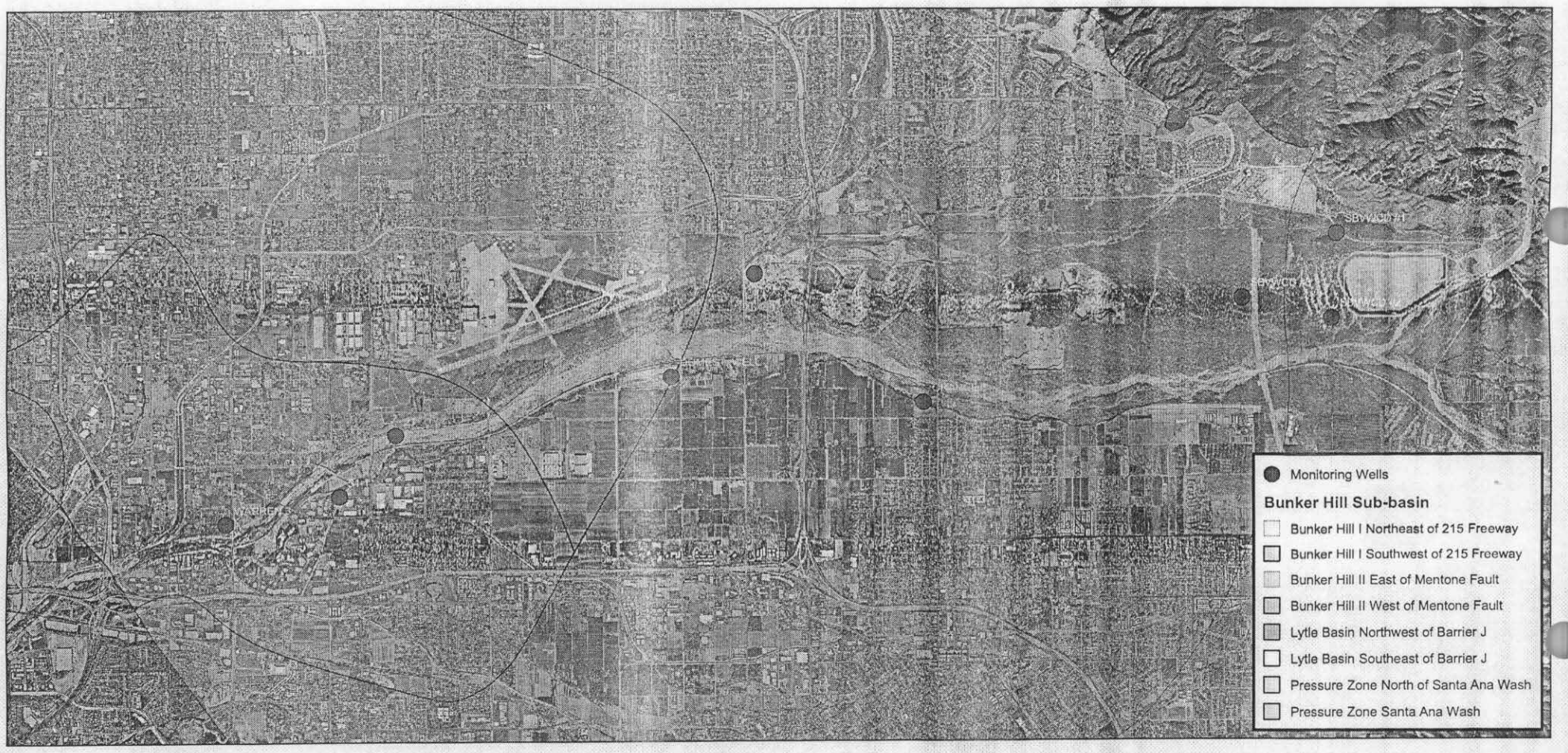
Data from Table 1

June 2004	Figure 9 Total Basin Recharge and District Recharge
TODD ENGINEERS Emeryville, California	





June 2004	**Figure 10** **Annual Santa Ana River Streamflow and District Recharge**
TODD ENGINEERS Emeryville, California	



California State Plane
NAD 83, Zone V, feet

Source: SBVWCD GIS
Created in ArcGIS

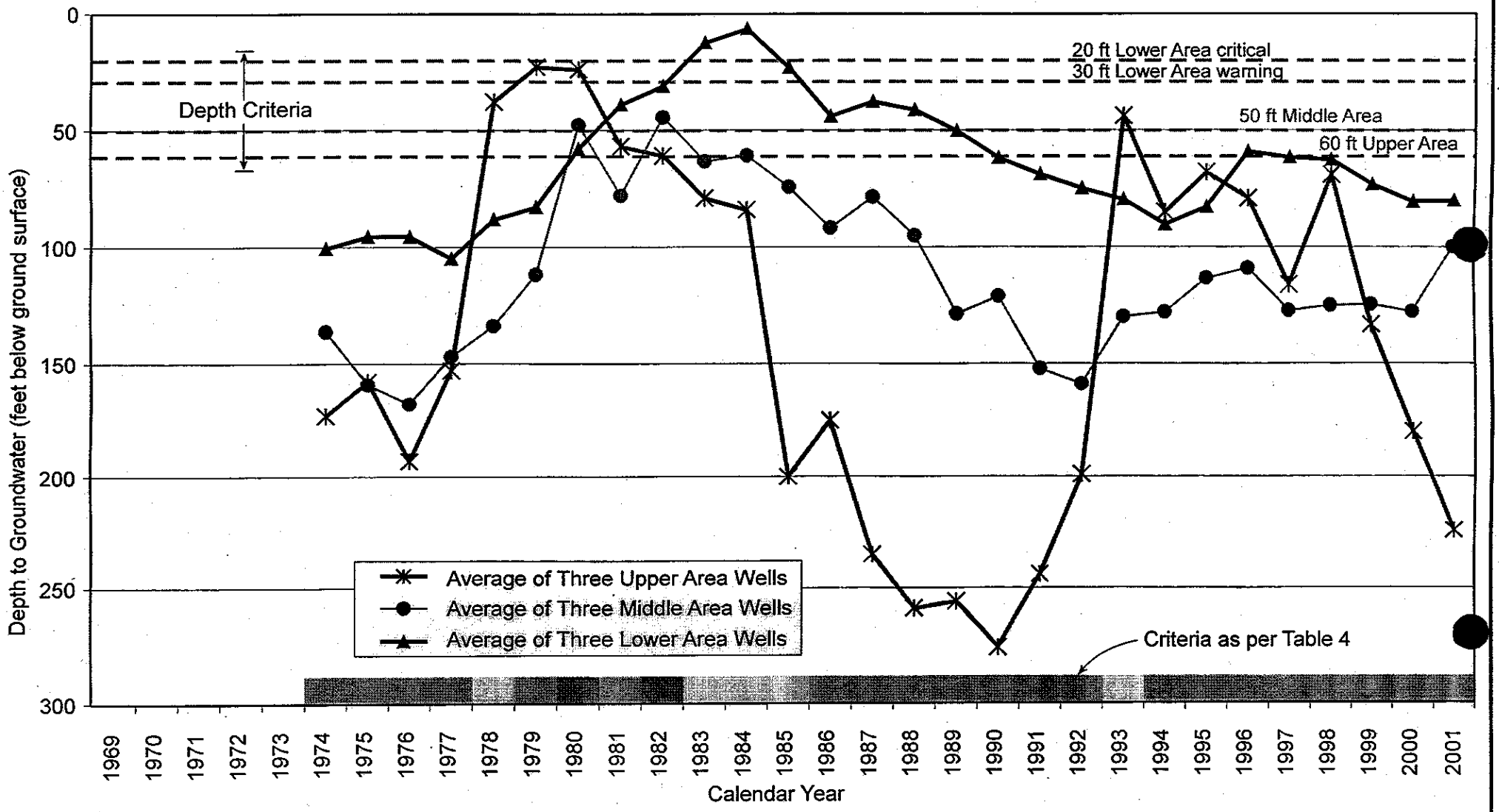
N
1 in = 4000 ft

Three Zones for Groundwater Monitoring

SBV WATER CONSERVATION DISTRICT
OUR NAME IS OUR MISSION

Program for Effective Recharge Coordination (June 2004)

Figure 11



June 2004	Figure 12
TODD ENGINEERS Emeryville, California	Maximum Average Groundwater Levels

Table 1
Total Basin Recharge and District Recharge

Water Year	District Santa Ana River and Mill Creek Recharge (AF)	Bunker Hill Basin Extraction (AF)	Change in Basin Storage (AF)	Ratio of District Recharge to Total Recharge* (%)
1969	44,260	171,128	294,367	10%
1970	13,552	173,662	-15,864	9%
1971	6,118	170,722	-21,340	4%
1972	2,983	164,145	-45,689	3%
1973	21,177	157,428	-5,303	14%
1974	10,625	157,887	4,776	7%
1975	10,407	157,973	-46,965	9%
1976	6,713	158,102	-33,740	5%
1977	3,352	153,305	-59,633	4%
1978	65,864	147,642	288,634	15%
1979	63,237	168,075	47,368	29%
1980	52,716	153,434	171,822	16%
1981	21,354	167,236	28,937	11%
1982	21,214	153,754	-3,042	14%
1983	28,427	148,452	136,343	10%
1984	15,499	171,449	-53,164	13%
1985	4,330	190,780	-104,413	5%
1986	12,191	189,428	-55,577	9%
1987	1,888	181,844	-87,184	2%
1988	3,775	187,060	-85,879	4%
1989	3,198	180,184	-136,477	7%
1990	1,775	168,453	-93,632	2%
1991	10,301	190,798	-42,951	7%
1992	18,765	181,608	88,692	7%
1993	58,793	200,040	187,890	15%
1994	21,229	190,311	-50,000	15%
1995	35,876	182,359	91,100	13%
1996	16,782	209,845	-84,200	13%
1997	15,359	200,451	-32,400	9%
1998	55,576	207,761	115,900	17%
Average	21,578	174,511	13,279	10%
Median	15,429	171,289	-26,870	9%

* Calculated as District Recharge/(Extractions + Storage Change)

Recharge data are from the District and are water year totals (October through September)

Extraction data are in calendar year totals from Western Municipal Water District and San Bernardino Valley Municipal Water District, *Water Extractions for Calendar Year 2000*, prepared for the California Water Quality Control Board December 2001 (includes full historical record, 1947-2000)

1969-1992 storage change data is for "San Bernardino Basin area" from San Bernardino Valley Municipal Water District, *Change in Groundwater Storage for the San Bernardino Basin Area, Calendar Years 1934 to 2001,* May 2002

1993-1998 storage change data is from District annual *Engineering Investigation of the Bunker Hill Basin* reports where storage change is from fall to fall

Table 2
Estimated Recharge Capacity of Major Streams

Stream Channel	Maximum Area (acres)	Recharge Capacity* (cfs)
Santa Ana River	2,110	4,255
Mill Creek	640	1,291
Plunge Creek	424	855
City Creek	154	311
Lytle and Cajon Creeks	2,400	4,840
Total	**5,728**	**11,552**

* Assumes a four foot per day recharge rate
cfs = cubic feet per second

Reference: Moreland, Joe A., *Artificial Recharge in the Upper Santa Ana Valley, Southern California* , US Geological Survey, Menlo Park, California, Open-File Report, prepared in cooperation with the San Bernardino County Flood Control District, April 6, 1972.

Table 3
Total Dissolved Solids and Nitrate in Santa Ana River and Mill Creek

Well Name	TDS (mg/l)	Nitrate (mg/l)
107	340	44
11A	500	11
120	190	20
121	0	0
125	200	3
12A	270	28
132-2 CULL #2	310	47
132-3	250	41
132-4	270	42
141	170	9
143	220	24
146	200	25
24A	360	21
24B	360	19
25A	390	29
27	490	61
28A	280	36
39	400	
40A	380	30
41	0	0
9A	230	30
26-1	470	31
27-1	480	29
27-2	540	48
29-1	580	52
29-2	510	29
29-3	460	37
30-1	320	32
31-1	290	21
46-1	390	33
51-1	270	37
56-1	210	13
66-1	290	40
92-1	220	18
92-2	160	6
92-3	200	10
98-1	210	4
Well #2	0	0
Well #5	174	5
Well #11	175	7
Well #3	451	18
Anderson 2	500	33
Anderson3	390	14
Nicks	0	0
Mt. View 1	0	0

DRAFT

Mt. View 4	0	0
Mt. View 3	190	
Richardson No. 1	180	8
Coburn		
Station 36		
Station 59	300	3
Station 69	0	0
Station 91	0	0
Palm Ave	0	0
10	350	57
13	320	46
2330		
31A	250	18
32	310	46
34	390	47
38	310	11
39	350	17
Agate 1	280	29
Agate 2	200	7
Airport	200	11
Airport 2	190	10
Church St	240	23
Crafton	280	40
East Lugonia 3	250	13
East Lugonia 4	210	8
East Lugonia 6	250	13
Hinckley		
Lee	560	43
Madeira	210	12
Maguet 2	260	19
Mentone Acres 2	200	24
Mission	360	51
Orange St	150	9
Redlands Height	0	0
Rees	0	0
Tate	0	0
LC1	231	7
LC10	200	7
LC8	272	11
LV3	172	4
RN17	441	9
RN20	634	16
RN6	430	21
RN7	660	24
Cooley H	210	13
Cooley I	220	13
Garner 1		
Garner 2	330	35
Garner 5	380	19
Garner 6	350	14
Garner 7	290	13
Hunt 10	360	28

DRAFT

Hunt 11	450	41
Hunt 6	380	34
Raub 2	260	25
Raub 3	300	39
Raub 4	290	39
Raub 5	440	16
Raub 6	220	14
Raub 8	220	8
Scheuer		
Stiles	430	45
Thorn 12	370	8
Warren 1	330	32
Warren 4		
Antil 4	0	0
Antil 5	0	0
Antil 6	476	23
Baseline	432	63
Cajon 2	305	18
Cajon 3	321	11
Cajon Cyn	453	6
Devil Cyn 1	300	17
Devil Cyn 2	343	21
Devil Cyn 3	357	8
Devil Cyn 4	359	8
Devil Cyn 5	334	8
Devil Cyn 6	343	2
Devil Cyn 7	334	2
EPA 1	299	26
EPA 2	324	26
EPA 3	343	24
EPA 4	334	22
EPA 5	324	18
EPA 6	368	29
EPA 7	352	25
Geothermal	219	2
Gilbert	312	14
Kenwood	459	7
Leroy	330	17
Lynwood	300	15
Lytle Ck 1	279	15
Lytle Ck 2	204	6
Mallory	302	13
Mill & "D" Street	313	9
Mt Vernon	319	21
Newmark 1	371	15
Newmark 2	331	13
Newmark 3	353	18
Newmark 4	314	14
Olive & Garner	265	4
Perris Hill 3	0	0
Perris Hill 4	429	39
Perris Hill 5	417	32

DRAFT

Vincent	440	7
Waterman	357	24
7th Street Well	356	22
10th & "J" Well	190	7
16th & Sierra Way	364	23
17th & Sierra Wa	398	21
19th Street #1	342	18
19th Street #2	397	24
23rd & "E" Street	0	0
25th Street	0	0
27th & Acacia	408	35
30th & Mt View	337	27
31st $ Mt. View	339	25
40th & Valencia	357	16
1		
11		
15	270	17
16		
18A		
2		
22A		
22B		
23A		
24		
30	250	6
33		
34		
35		
36		
37		
4		
40		
41		
5A		
7		
8		

Table 4
Groundwater Depth Scenarios and PERC Operating Conditions

Groundwater Depths (feet below ground surface)			PERC Operating Criteria
Lower/Pressure Area	Middle Area	Upper Area	
greater than 30	greater than 50	any depth	**Continue** Recharging
greater than 30	**50 or less**	greater than 60	* **Warning:** review data and modify recharge as needed
30 or less	greater than 50	any depth	
any depth	**50 or less**	**60 or less**	**Stop** recharging until water levels fall below the critical depths
20 or less	**50 or less**	any depth	

*** In addition, a warning condition would be entered whenever groundwater levels rise over 50 feet in a single year in any area.**

SAN BERNARDINO VALLEY WATER CONSERVATION DISTRICT
Established 1932

1630 West Redlands Boulevard, Suite A
Redlands, CA 92373-8032
(909) 793-2503
Fax: (909) 793-0188

P.O. Box 1839
Redlands, CA 92373-0581
Email: info@sbvwcd.dst.ca.us

February 18, 2003

James Roddy
Executive Officer
Local Agency Formation Commission
County of San Bernardino
175 W. 5th Street, 2nd Floor
San Bernardino, CA 92415-0490

Dear Mr. Roddy:

The San Bernardino Valley Water Conservation District ("Conservation District") has developed a partnership program with the Los Angeles District of the U.S. Army Corps of Engineers ("Corps of Engineers") for a project within their Environmental Restoration Program. The project is the "Seven Oaks Dam Borrow Pit Groundwater Conservation and Habitat Restoration Project" ("Project") (Please see the attached Location Map). The Corps of Engineers has prepared a Preliminary Restoration Plan ("PRP") for the Project, and will soon begin a feasibility and environmental analysis, known as the Detailed Project Report or "DPR".

The Project will restore the approximately 200 acres of land in the Seven Oaks Dam pervious borrow pit to a series of groundwater recharge percolation basins, surrounded by and supporting native habitat (please see the attached Project map). The recharged water will provide high quality groundwater in the Bunker Hill Groundwater Basin ("Basin") to customers in the San Bernardino Valley. Since 1969, the Conservation District has recharged annually nearly 16,000 acre-feet of Santa Ana River water and nearly 6,000 acre-feet of Mill Creek water, the principal tributary to the Santa Ana River. Additionally, the Basin is one of only three in the Santa Ana River watershed that has improved its quality in total dissolved solids and nitrate-nitrogen, two of the most prominent water contaminants. The marked improvement in water quality in the Basin is attributable to the continued recharge of the Basin by the Conservation District. With the current drought, the uncertainty of future state water project deliveries, and the drastic reduction in California's use of Colorado River water, projects like this one are essential to securing the water future of this region and the state.

The Project is also compatible with the Land Management and Habitat Conservation Plan for the Upper Santa Ana River Wash, a cooperative planning effort by cities, counties, water agencies, mining companies, state and federal wildlife agencies, the Corps of Engineers, and

the U.S. Bureau of Land Management (BLM) to assure a balanced land allocation amongst water conservation, mining of sand and gravel, wildlife habitat, recreation, and infrastructure uses (Please see the attached Concept Plan map). This cooperative project is now under contract to develop the environmental analysis and implementation documents. Representatives from the Corps of Engineers have advised that the DPR will be accomplished this fiscal year with available funding; however, the Corps of Engineers will need additional funds to prepare construction plans and specifications. Therefore, the Conservation District has requested Congressman Jerry Lewis to sponsor an addition to the FY 2004 Energy and Water Bill for $400,000 in the Section 1135, Environmental Restoration Program, for this very important project. Construction funding in the amount of $5.0 million will be sought in the FY 2005 appropriation. The total project estimate is $7.0 million. The Conservation District will fund the local share above $5.0 million.

We are extremely pleased about the enthusiasm of the Corps of Engineers for the Project. Our hope is to preserve the momentum that their support has generated and move towards completing this important groundwater conservation and environmental restoration project associated with construction of Seven Oaks Dam. We would, therefore, appreciate your support for this regionally significant Project by sending a letter to Congressman Lewis endorsing the need for the $400,000 appropriation in the FY 2004 budget, and follow on construction appropriation in the FY 2005 appropriation. A sample letter is attached for your consideration. If you believe it to be more appropriate, you may address a letter to the Conservation District, and we will advise Congressman Lewis of your support.

We appreciate your support of the Project. Should you need any additional information, please contact our General Manager, D. Burnell Cavender, at 909-793-2503 or email at bcavender@sbvwcd.dst.ca.us.

Yours truly,

Sterling Woodbury

Sterling Woodbury, President
Board of Directors

Enclosures: Location Map
Seven Oaks Dam Borrow Pit Groundwater Conservation and Habitat Restoration Project
Land Management and Habitat Conservation Plan--Concept Plan Map
Sample Letter to Congressman Jerry Lewis

SAN BERNARDINO VALLEY WATER CONSERVATION DISTRICT
Established 1932

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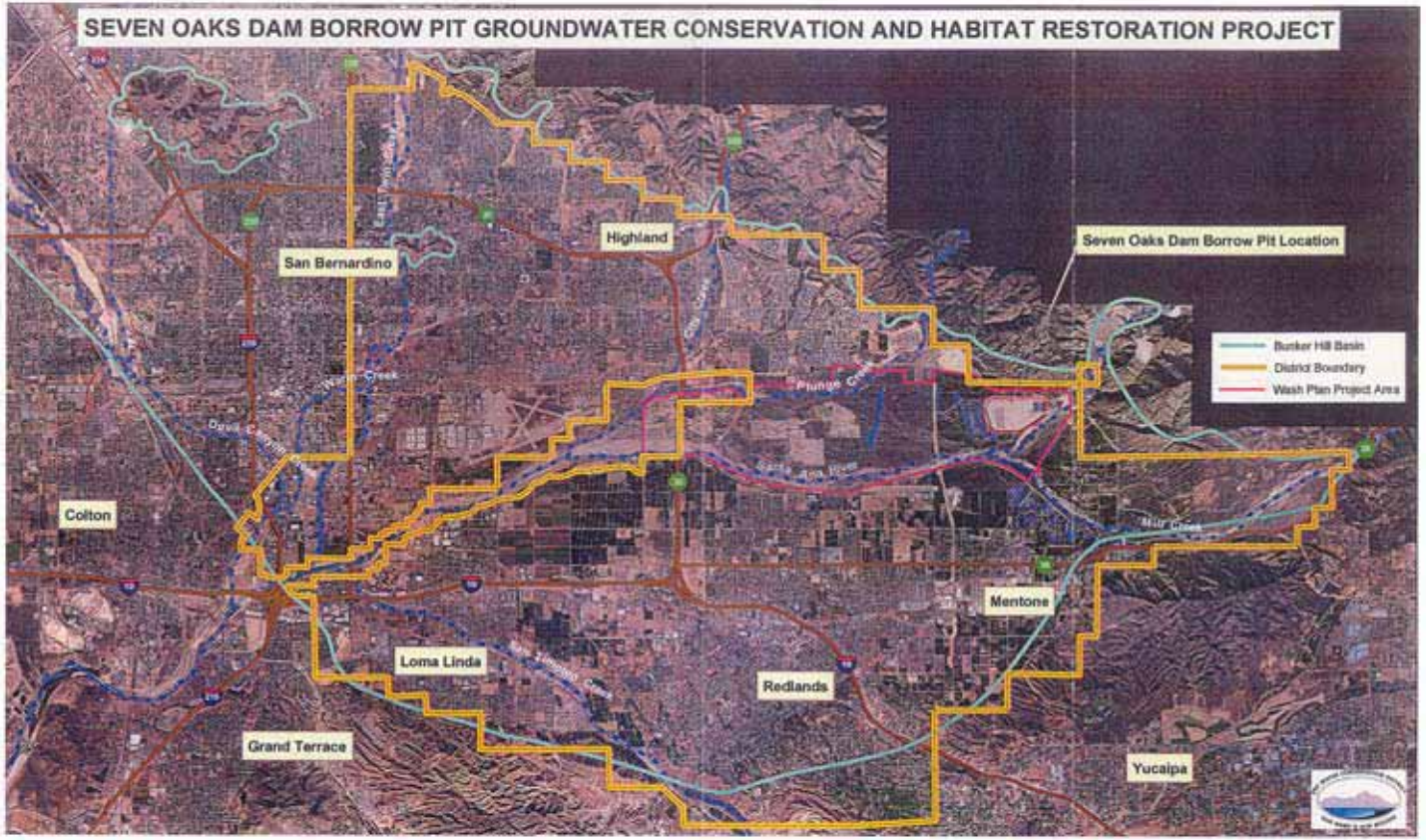
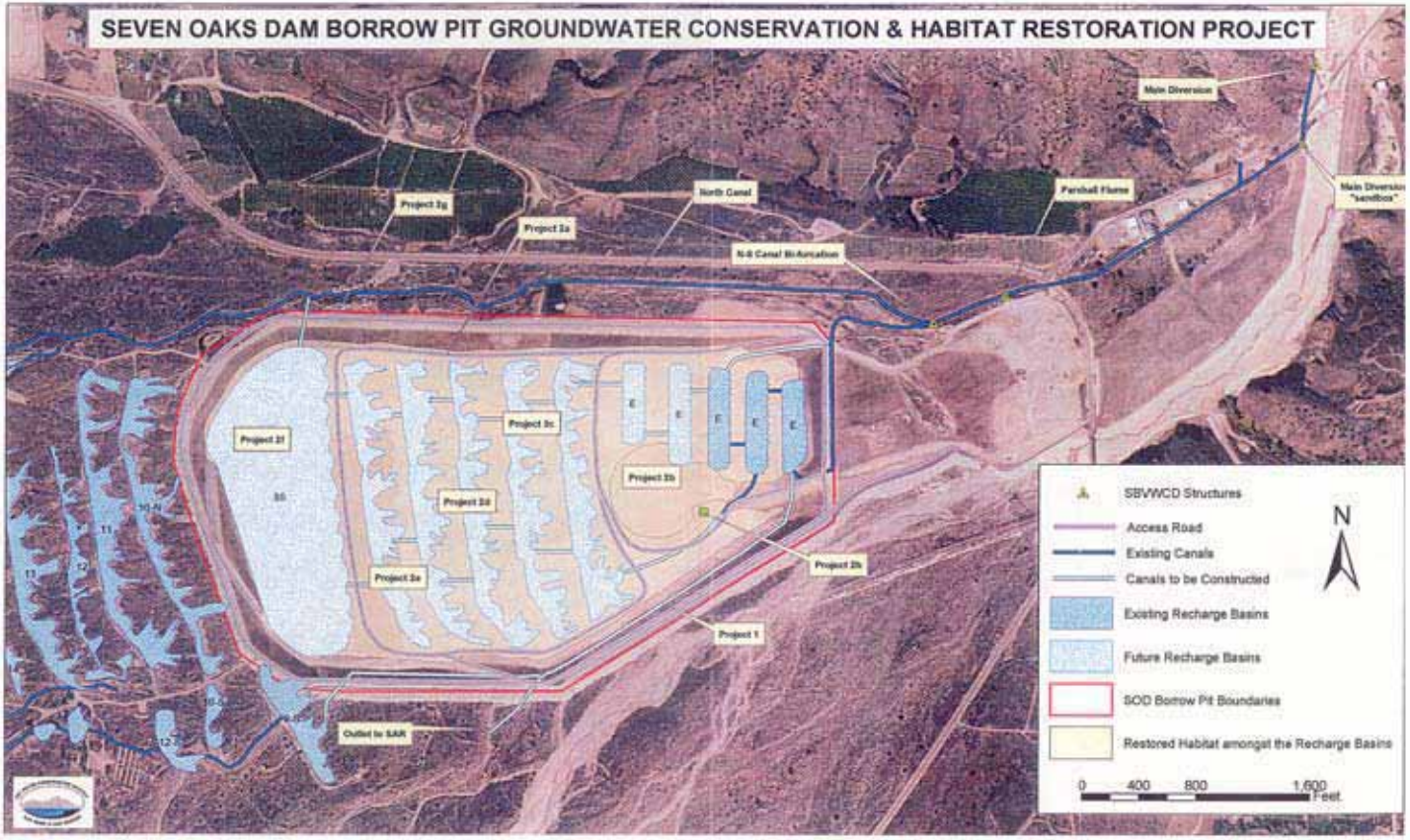
SEVEN OAKS DAM BORROW PIT

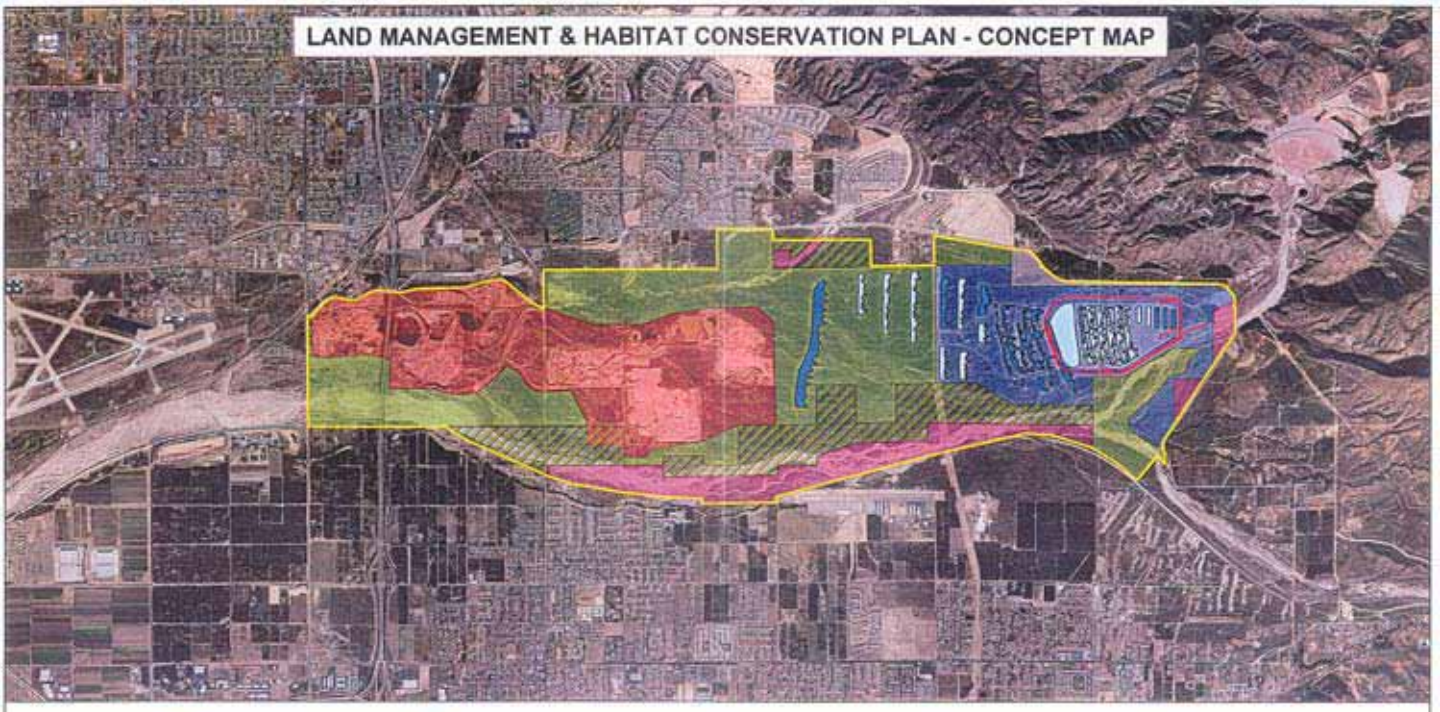
Groundwater Conservation and Habitat Restoration Project

PROJECT	DESCRIPTION	AMOUNT
1	South Canal	$1,200,000
2a	Perimeter Road	$200,000
2b	East Basins	$1,200,000
2c	North Basins	$1,200,000
2d	Middle Basins	$1,200,000
2e	South Basins	$1,400,000
2f	Surface Storage Basin	$300,000
2g	Surface Storage Feeder	$200,000
2h	Equipment Storage Area	$100,000
TOTAL		$7,000,000


SEVEN OAKS DAM BORROW PIT GROUNDWATER CONSERVATION AND HABITAT RESTORATION PROJECT
Seven Oaks Dam Borrow Pit Location
Bunker Hill Basin
District Boundary
Wash Plan Project Area
San Bernardino
Highland
Colton
Loma Linda
Redlands
Grand Terrace
Mentone
Yucaipa
Plunge Creek
Mill Creek


SEVEN OAKS DAM BORROW PIT GROUNDWATER CONSERVATION & HABITAT RESTORATION PROJECT
Main Diversion
Main Diversion "sandbox"
Parshall Flume
North Canal
N-S Canal Bi-furcation
Project 2g
Project 2a
Project 2f
Project 2c
Project 2d
Project 2e
Project 2b
Project 1
Outlet to SAR
SBVWCD Structures
Access Road
Existing Canals
Canals to be Constructed
Existing Recharge Basins
Future Recharge Basins
SOD Borrow Pit Boundaries
Restored Habitat amongst the Recharge Basins
N
0
400
800
1,600
Feet

LAND MANAGEMENT & HABITAT CONSERVATION PLAN - CONCEPT MAP



PROPOSED

LAND MANAGEMENT AND HABITAT CONSERVATION PLAN FOR THE UPPER SANTA ANA RIVER WASH

EXECUTIVE SUMMARY

PREPARED FOR THE
SANTA ANA RIVER WASH AREA COORDINATED
PLANNING ACTIVITIES COMMITTEE

BY

STAFF OF THE
SAN BERNARDINO VALLEY WATER CONSERVATION DISTRICT

APRIL 2001
(Figures Revised May 29, 2003)

PROPOSED LAND MANAGEMENT AND HABITAT CONSERVATION PLAN FOR THE UPPER SANTA ANA RIVER WASH

Lawrence M. Libeu
General Manager
San Bernardino Valley Water Conservation District

Introduction

The land area between the mouth of the Santa Ana River Canyon, down stream of the new Seven Oaks Dam on the east, Interstate 215 (I-215) on the west, the cities of Highland and Redlands to the north and south, respectively, is known locally as the Upper Santa Ana River Wash (Wash) (Fig 1). A part of that Wash, containing approximately 5,200 acres, from the canyon mouth to Alabama Street on the west and bounded by the cities, has been the subject of intense planning the past three years. This area is known as the Wash Planning Area or the "WPA" (Fig 2).

Historically, the Wash was a natural flood plain and alluvial fan. In the past, the flood plain has provided a place to convey frequently devastating flood waters and deposit sediment. The alluvial deposit provides excellent geologic conditions to establish settling basins for percolating surface water to the groundwater basin, providing a significant part of the water supply for the local region. These same geologic conditions provide regionally significant deposits of sand and gravel as classified by the California Department of Conservation, that are used to support the local economy. In recent years, the value of the Wash as habitat for a variety of sensitive, threatened, and endangered species has become more apparent due to the decrease in this type of habitat throughout Southern California (Fig 3). Because the Wash is a unique open space and corridor, the County of San Bernardino (County) and the cities of Highland and Redlands are also planning to establish a series of recreational trails in and around the Wash. These important functions within the Wash, flood control, water conservation, mineral extraction, and wildlife habitat, are often in direct competition for much of the same land. It has been apparent since the early 1980s that a land management plan for the future use of the Wash would be needed to maintain other public services (water supply facilities, transportation and utility corridors, and recreation/trails), provide areas for the extraction of valuable construction materials, and preserve declining sensitive habitats.

In 1993, representatives of numerous agencies, including water, mining, flood control, wildlife and municipal interests, formed a Wash Committee to address local mining issues. Subsequently, the role of the Committee was expanded to address all the land functions in the Wash. The Wash Committee began meeting again in 1997 to determine how to use the WPA to accommodate all the important functions identified above. A Policy Action Committee (PAC) was established consisting of elected officials from the County, cities of Highland and Redlands, and the San Bernardino Valley Water Conservation District (District), and the Field Manager from the U.S. Bureau of Land Management (BLM). A Technical Advisory Committee (TAC) was formed with

representatives of the PAC agencies and other water, mining, flood control, and wildlife interests. The District chairs and provides staff support for the Committees.

The TAC, in concept, wiped the WPA clean of land ownership lines (Fig 4) and began anew to decide how the land could best be used. As a result of extensive workshops during 1998 and 1999, a conceptual Coordinated WPA map has been developed. As expected, the way the land might best be used and the way the land use was planned were not the same, nor does it conform to current land ownership. For example, the TAC found that some land proposed for mining was better suited for joint use by water conservation and wildlife habitat while other areas proposed for habitat preservation could be used better for mining. It became apparent that to make a plan work, land ownership would have to change, in particular, a land transfer or exchange between the BLM and the District, and areas leased by the District for mining.

A general consensus of the TAC was reached in early 2000 on the areas within the WPA designated for the specified land uses, which is the basis of the Land Management and Habitat Conservation Plan (Plan) (Fig 5). As stated, the proposed designations for land use crossed land ownership (3 public and 2 private) and land use authority lines (2 cities and the County). The TAC determined that mining expansion is best addressed by consolidating the future mining activity into one large area adjacent to existing mining operations within the western half of the WPA. This focuses extraction activities on lands currently disturbed by mining and lands with the least long-term wildlife habitat value. Furthermore, the TAC determined that portions of the BLM land designated as Areas of Critical Environmental Concern (ACEC) were either previously disturbed or were fragmented by adjacent mining activities, and thus would be better suited for mining expansion. Some of the most intact, viable wildlife habitat areas are contained within lands that are leased for future mining and currently used for water conservation. The TAC concluded that some of these lands were best suited for joint use as water and habitat conservation rather than mining. For example, the up-gradient side of a percolation basin dike could be wetted and periodically contain water for water-dependent species; whereas, the down-gradient side could generally remain undisturbed, except for maintenance and repair of the percolation basin dike and, therefore, could support other wildlife species common to the WPA.

Refinements in land use boundaries were made and agency and jurisdictional coordination was accomplished. The result of this effort is a proposed Plan that designates areas of the WPA for specific uses. The Plan will allow the existing and future Wash activities and land functions to occur and establish habitat preserves.

It is imperative that the principles that will govern the use, management, and conservation of the WPA be set forth in legally binding documents to which all concerned parties can agree. The PAC believes that there are sufficient lands in the WPA that can be divided equitably among the advocates to accommodate the needs for water conservation and supply facilities, aggregate extraction, and flood protection, while providing land for wildlife habitat and recreation.

It is equally important to note that if this coordinated Plan is not implemented, the consequences could be very grave for each of the primary use groups. Without the Plan, attempts to expand water conservation to meet future demands, develop additional aggregate resources, or effectively protect habitat will likely be held up by legal proceedings. Such action could result in

piecemeal planning, thus impairing the ability to reach an effective compromise. If local land use agencies make decisions regarding mining development in the WPA, without considering a coordinated plan, there could be greater environmental degradation and reduced ability to meet future water supply demands. On the other hand, if local officials make land use decisions that significantly restrict water conservation activities and mining, the reduced availability of water and aggregate resources may impact the economic development of the region. The affect of not implementing this Plan is that none of the groups would be able to accomplish its goals.

Proposed Project Description Summary

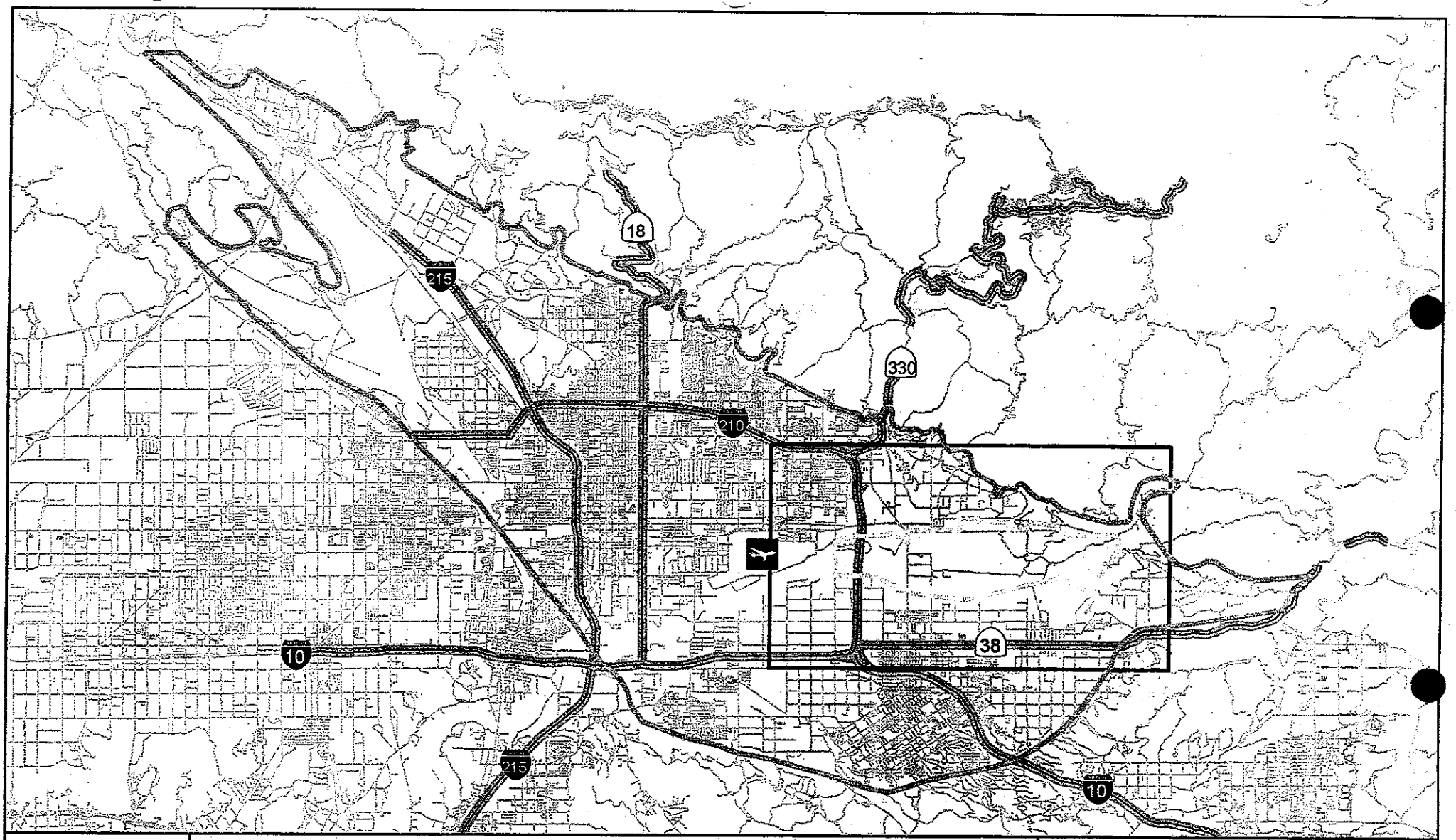
The proposed project is a Land Management and Habitat Conservation Plan (Plan) for the Upper Santa Ana River Wash Planning Area. The land area addressed in this Plan is part of the overall alluvial fan and flood plain located along the Santa Ana River one mile downstream from the new Seven Oaks Dam between the cities of Highland on the north and Redlands to the south. The City of San Bernardino, to the northwest, is the largest city in the San Bernardino Valley. The WPA covers approximately 5,200 acres and starts at the canyon mouth at Greenspot Road, extends for some six miles to Alabama Street, and is as much as two miles wide.

The Plan will coordinate and accommodate existing ongoing and anticipated future activities planned to occur in the WPA, establish habitat preserve areas, and provide recreational trails. Each function will occupy designated specific areas within the WPA best suited for that function and will also accommodate the other competing uses for the overall benefit of the WPA. These existing and future activities include the following:

- Water conservation of both native and (when necessary) imported water resources for groundwater basin replenishment to augment public water supplies;
- Flood control, and management of the Seven Oaks Dam releases;
- Aggregate extraction and processing;
- Protection and conservation of sensitive and listed native species and habitat;
- Recreation planning including a portion of the Santa Ana River trail system; and
- Utilities, transportation, and water supply corridors and facilities.

The final approved Plan, its associated actions and permits, and environmental review will provide the necessary information for jurisdictional approvals for the described activities to move forward. The Plan, when implemented will be considered a "Win-Win-Win" for all the water, utility and service functions, mineral resource management, and environmental resource preservation.

As staff for the Wash Committee, the District invites your questions and support for this inter-relational concept plan. You may call me at 909-793-2503, or write to me at P.O. Box 1839, Redlands, CA 92373.



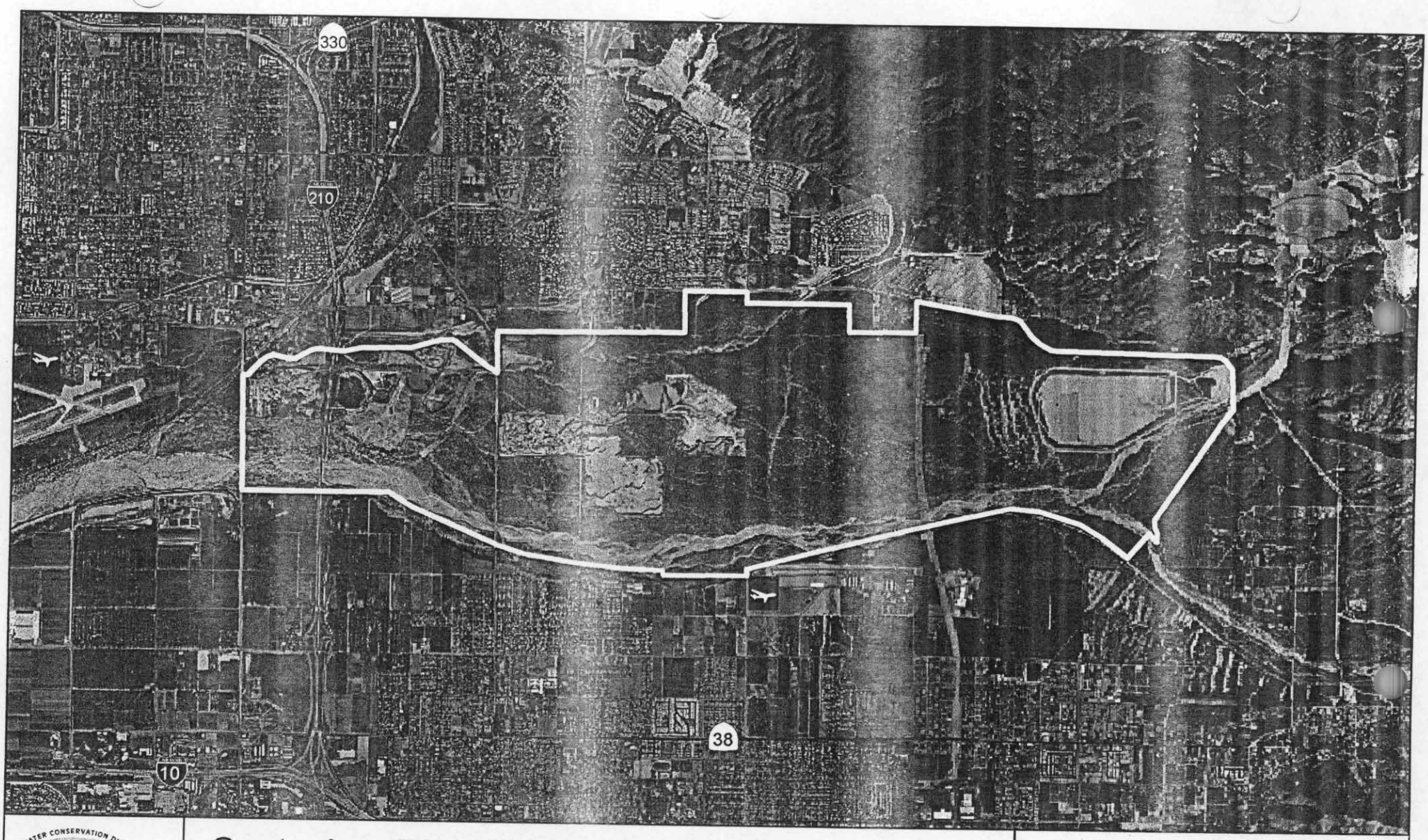
SBV WATER CONSERVATION DISTRICT
OUR BASIN IS OUR MISSION

N

29-May-2003 1" =15000'

Santa Ana River Wash Planning Area (Plan B) - Location Map (fig. 1)

Bunker Hill Basin
Area of Interest
Major Roadways
WPA Boundary



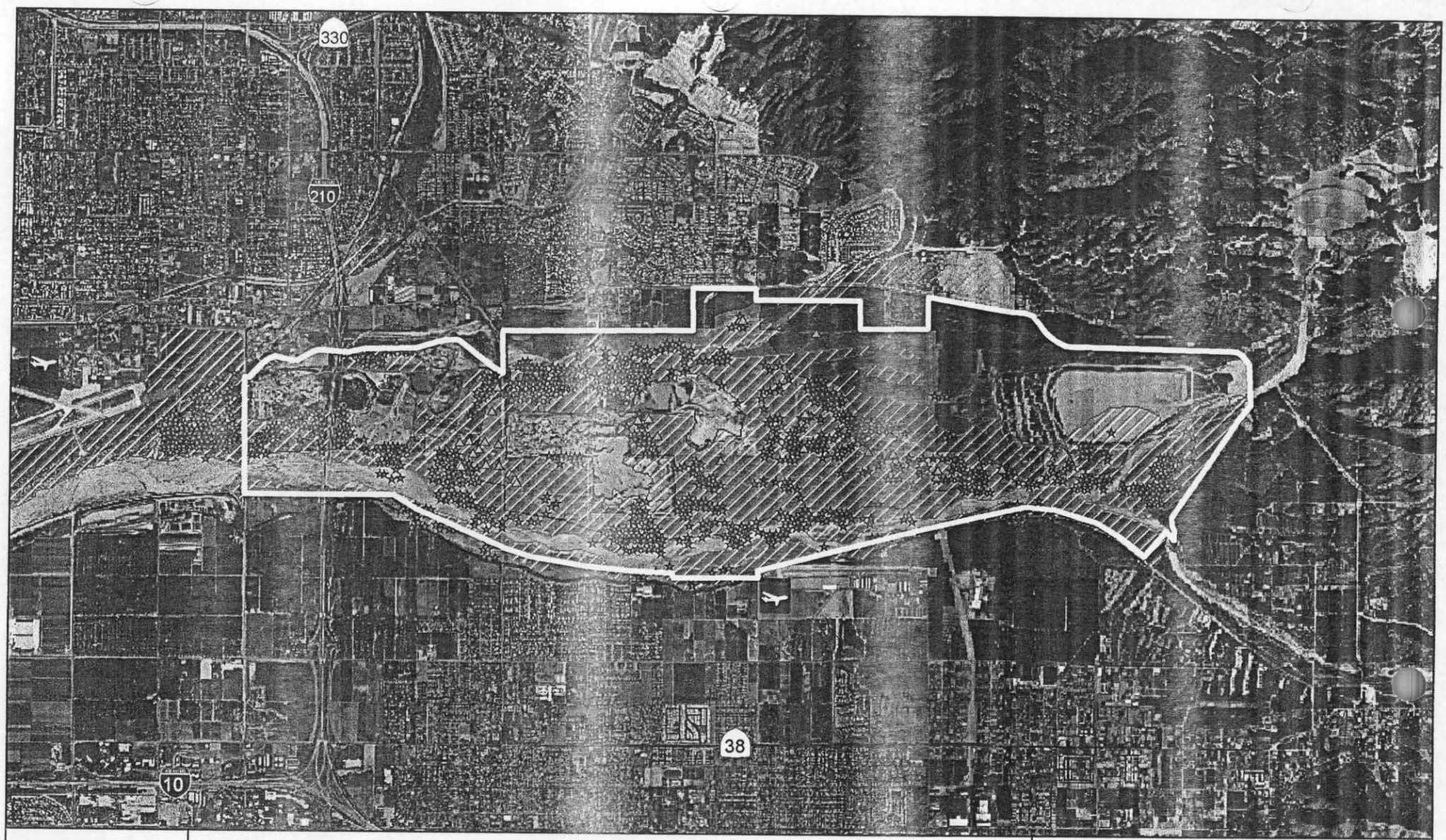
SBV WATER CONSERVATION DISTRICT
OUR NAME IS OUR MISSION

N

29-May-2003 1" = 4200'

Santa Ana River Wash Planning Area (Plan B) - Wash Planning Area (fig. 2)

WPA Boundary



SBV WATER CONSERVATION DISTRICT
OUR NAME IS OUR MISSION

N

29-May-2003 1" = 4200'

Santa Ana River Wash Planning Area (Plan B) - Biological Resources (fig. 3)

★ Woolly Star

▲ Spineflower

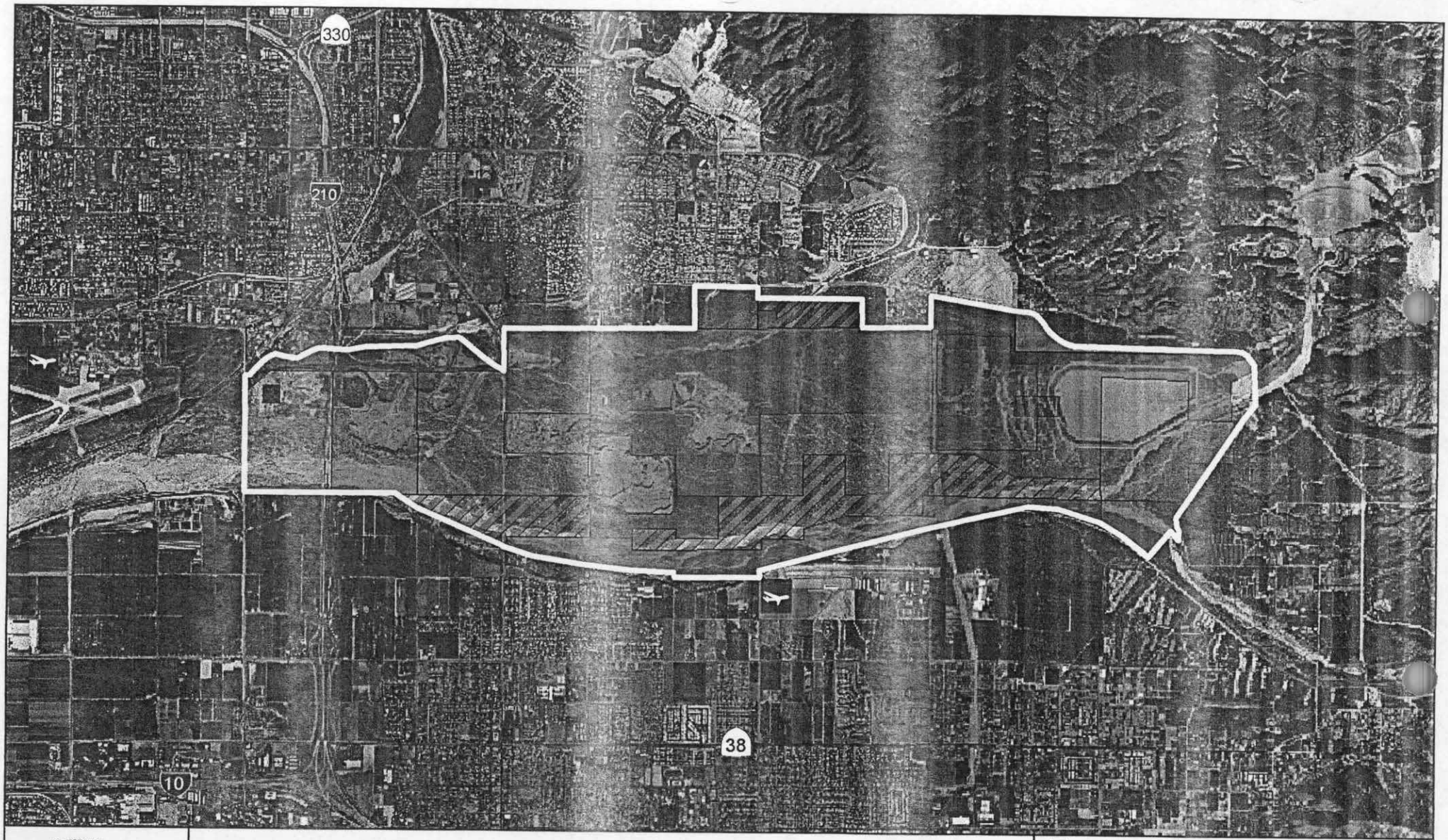
Poss. K-rat Habitat

Sage Scrub

pioneer

intermediate

mature



SBV WATER CONSERVATION DISTRICT
OUR NAME IS OUR MISSION

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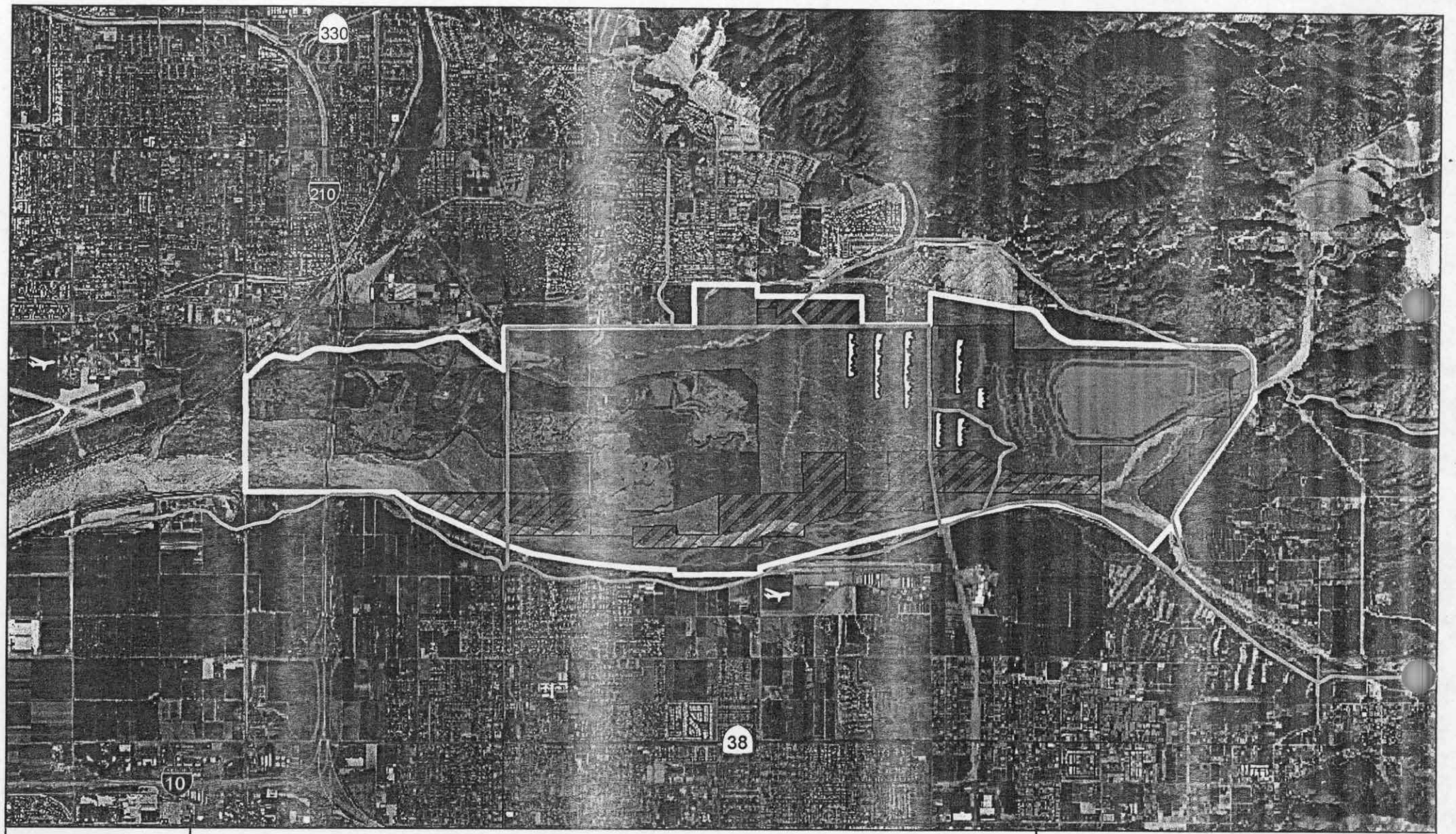
29-May-2003 1" = 4200'

Santa Ana River Wash Planning Area (Plan B) - Land Ownership (fig. 4)

- SBVWCD
- BLM
- SBCFCD
- Redlands
- Woolly Star Preserve
- Robertson's
- CEMEX
- Not In Study



SBV WATER CONSERVATION DISTRICT
OUR NAME IS OUR MISSION

N

29-May-2003 1" = 4200'

Santa Ana River Wash Planning Area (Plan B) - Land and Habitat Management Plan (fig. 5)

WPA Boundary
Not In Study
Planned Basins
Woolly Star Preserve
Mining
Flood Control
Habitat
Water Conserv.

SBV Water Conservation District
Historical Spreading from Santa Ana River

Year	Water Year Total
1912	9,103
1913	2,211
1914	23,934
1915	28,596
1916	11,776
1917	7,463
1918	4,441
1919	4,969
1920	6,145
1921	8,717
1922	80,065
1923	18,518
1924	3,304
1925	0
1926	8,678
1927	14,417
1928	1,217
1929	1,268
1930	2,089
1931	0
1932	10,227
1933	0
1934	222
1935	2,021
1936	541
1937	10,551
1938	6,942
1939	8,730
1940	5,707
1941	8,558
1942	4,635
1943	8,473
1944	6,394
1945	7,332
1946	3,794
1947	5,160
1948	1,134
1949	5,087
1950	2,595
1951	394
1952	8,786
1953	2,653
1954	6,672
1955	3,760
1956	1,234
1957	2,922
1958	11,308
1959	1,149
1960	1,937
1961	64
1962	4,756
1963	590

SBVWater Conservation District
Historical Spreading from Santa Ana River

Year	Water Year Total
1964	1,099
1965	3,464
1966	5,766
1967	9,406
1968	6,456
1969	31,354
1970	10,330
1971	5,587
1972	2,881
1973	18,245
1974	9,458
1975	9,699
1976	5,905
1977	3,038
1978	52,172
1979	49,484
1980	39,054
1981	16,750
1982	16,118
1983	15,222
1984	12,995
1985	186
1986	8,198
1987	0
1988	2,057
1989	2,950
1990	1,436
1991	6,971
1992	12,206
1993	38,993
1994	11,308
1995	19,822
1996	13,041
1997	10,000
1998	39,306
1999	6,043
2000	5,871
2001	3,468
2002	1,364
2003	10,729
2004	2,934

Beginning November 1984, includes Santa Ana River water spread in Mill Creek via Greenspot Pipeline Turnout
Beginning March 1999, includes water released from SBVWCD facilities for use as Blend Water for the Pilot Dewa

Mill Creek Spreading
San Bernardino Valley Water Conservation District

Year	TOTAL WY					
1911-12	0					
1912-13	0					
1913-14	0					
1914-15	0					
1915-16	0					
1916-17	0					
1917-18	0					
1918-19	0					
1919-20	0					
1920-21	0					
1921-22	28,868					
1922-23	4,320					
1923-24	693					
1924-25	340					
1925-26	2,350					
1926-27	6,720					
1927-28	3,700					
1928-29	230					
1929-30	3,220					
1930-31	480					
1931-32	7,200					
1932-33	1,236					
1933-34	100					
1934-35	9,100					
1935-36	5,000					
1936-37	20,047					
1937-38	4,190					
1938-39	6,413					
1939-40	6,547					
1940-41	10,912					
1941-42	5,217					
1942-43	8,927					
1943-44	7,478					
1944-45	9,042					
1945-46	2,572					
1946-47	2,986					
1947-48	627					
1948-49	0					
1949-50	208					
1950-51	50					
1951-52	4,197					
1952-53	2,691					
1953-54	2,271					
1954-55	1,060					
1955-56	1,140					
1956-57	1,562					
1957-58	5,173					
1958-59	1,121					
1959-60	1,686					

Mill Creek Spreading
San Bernardino Valley Water Conservation District

Year	TOTAL WY
1960-61	32
1961-62	1,883
1962-63	171
1963-64	332
1964-65	863
1965-66	4,026
1966-67	6,677
1967-68	3,524
1968-69	12,906
1969-70	3,222
1970-71	531
1971-72	102
1972-73	2,932
1973-74	1,167
1974-75	708
1975-76	808
1976-77	314
1977-78	13,692
1978-79	13,753
1979-80	13,662
1980-81	4,604
1981-82	5,096
1982-83	13,205
1983-84	2,504
1984-85	4,144
1985-86	3,993
1986-87	1,888
1987-88	1,718
1988-89	248
1989-90	339
1990-91	3,330
1991-92	6,559
1992-93	19,800
1993-94	9,921
1994-95	16,054
1995-96	3,741
1996-97	5,359
1997-98	16,270
1998-99	2,158
1999-00	4,000
2000-01	3,343
2001-02	386
2002-03	4,893
2003-04	3,091
2004-05	

1984-85 to Dec 98, includes Santa Ana River water spread on Mill Creek

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District Budget for 2004-2005, Budget for 2003-04 and Audit Report for 2003-2004

Attachment 5

San Bernardino Valley Water Conservation District

		2004 - 2005 Budget			
		General Fund	Groundwater Replenishment	Total	
		Jul 04 - Jun 05	Jul 04 - Jun 05	Jul 04 - Jun 05	%
INCOME					
4010 Interest Income					
4012	LAIF	140,000.00		140,000.00	
	Total Interest Income	**140,000.00**	**0.00**	**140,000.00**	
4020 Groundwater Charge					
4021	Assessments		513,975.00	513,975.00	
	Total Groundwater Charge	**0.00**	**513,975.00**	**513,975.00**	
4030 Mining Income					
4032	Cemex Mining	810,000.00		810,000.00	
4034	Redlands Aggregate 5% Royalty	36,000.00		36,000.00	
	Total Mining Income	**846,000.00**	**0.00**	**846,000.00**	
4040 Miscellaneous Income		**700.00**	**0.00**	**700.00**	
4050 Property Tax Income		**60,000.00**	**0.00**	**60,000.00**	
4060 Property Income					
4062	Mentone Property	6,000.00		6,000.00	
4063	Water Cons. Dist. Plaza	30,000.00		30,000.00	
4064	City of Redlands Well Site Lease	0.00		0.00	
	Total Property Income	**36,000.00**	**0.00**	**36,000.00**	
4070 Source Water Assessment Plan		**5,000.00**	**0.00**	**5,000.00**	
4075 Plan B Reimbursements		**20,000.00**	**0.00**	**20,000.00**	
4080 Exchange Plan		**30,000.00**	**0.00**	**30,000.00**	
4085 AB 303 Monit. Wells Reimbursement		**0.00**	**200,000.00**	**200,000.00**	
	TOTAL INCOME	**1,137,700.00**	**713,975.00**	**1,851,675.00**	

GROUNDWATER ASSESSMENT

AGRICULTURAL : $1.65/AF

NON-AG : $6.05/AF

San Bernardino Valley Water Conservation District

		2004 - 2005 Budget			
		General Fund	Groundwater Replenishment	Total	
		Jul 04 - Jun 05	Jul 04 - Jun 05	Jul 04 - Jun 05	%
EXPENSE					
5000 Regional Programs					
4210	SAWPA Programs		0.00	0.00	
4240	Research Contribution	0.00		0.00	
4250	LAFCO Contribution	1,350.00		1,350.00	
	Total Regional Programs	**1,350.00**	**0.00**	**1,350.00**	
5100 Professional Services					
5110	Water Quality Testing		0.00	0.00	
5120	Misc. Professional Services	2,000.00		2,000.00	
5130	Aerial Photography & Surveying	0.00		0.00	
5140	Legislative Services	54,000.00		54,000.00	
5150	Public Relations Services	0.00		0.00	
5160	Computer Services	2,000.00	0.00	2,000.00	
5170	Audit & Accounting	8,000.00	8,000.00	16,000.00	50/50
5180	Legal	70,000.00	70,000.00	140,000.00	50/50
5190	Wash Plan	115,000.00		115,000.00	
	Total Professional Services	**251,000.00**	**78,000.00**	**329,000.00**	
5200 Field Operations					
5210	Equipment Maintenance		1,500.00	1,500.00	
5220	Maintenance Materials for Shop, Field		3,000.00	3,000.00	
5230	Field Tools		1,500.00	1,500.00	
5240	Facility Maintenance		10,000.00	10,000.00	
5250	Emergency Repairs		5,000.00	5,000.00	
	Total Field Operations	**0.00**	**21,000.00**	**21,000.00**	
5300 Vehicle Operations					
5310	Vehicle Maintenance	1,200.00	2,800.00	4,000.00	30/70
5320	Fuel	2,400.00	5,600.00	8,000.00	30/70
	Total Vehicle Operations	**3,600.00**	**8,400.00**	**12,000.00**	
5400 Utilities					
5410	Alarm Service	400.00		400.00	
5420	Electricity	9,800.00		9,800.00	
5430	Mobile Phone	1,600.00	1,500.00	3,100.00	52/48
5440	Telephone	8,700.00	2,500.00	11,200.00	78/22
5450	Natural Gas	1,400.00		1,400.00	

San Bernardino Valley Water Conservation District

		2004 - 2005 Budget			
		General Fund	Groundwater Replenishment	Total	
		Jul 04 - Jun 05	Jul 04 - Jun 05	Jul 04 - Jun 05	%
5460	Water	1,800.00		1,800.00	
	Total Utilities	**23,700.00**	**4,000.00**	**27,700.00**	
6000	**General Administration**				
6003	Property Tax	250.00		250.00	
6006	Permits	350.00		350.00	
6009	Licenses	350.00		350.00	
6012	Office Maintenance	500.00		500.00	
6015	Mentone House Maint.	1,000.00		1,000.00	
6018	Janitorial Services	7,200.00		7,200.00	
6021	Office Equipment Maint.	1,000.00		1,000.00	
6024	Computer Equipment Maintenance	1,000.00		1,000.00	
6027	Computer Supplies	1,000.00		1,000.00	
6030	Office Supplies	7,500.00		7,500.00	
6033	Office Equipment Rental	0.00		0.00	
6036	Printing	4,000.00		4,000.00	
6039	Postage & Overnight Delivery	3,200.00		3,200.00	
6042	Payroll Processing	2,175.00		2,175.00	
6045	Bank Service Charges	45.00		45.00	
6048	Furniture & Accessories	0.00		0.00	
6051	Uniforms		800.00	800.00	
6054	Elections	0.00		0.00	
6057	Directors' Fees	55,000.00		55,000.00	
6060	Outreach	10,500.00		10,500.00	
6063	Meeting Support Expense	2,500.00		2,500.00	
6066	Mileage	2,000.00		2,000.00	
6069	Air Fare	11,500.00		11,500.00	
6072	Other Travel	4,125.00		4,125.00	
6075	Meals	7,900.00		7,900.00	
6078	Lodging	22,900.00		22,900.00	
6081	Conf/Seminar Registrations	18,000.00		18,000.00	
6084	Training Registrations	1,000.00		1,000.00	
6087	Educational Reimbursement	4,500.00		4,500.00	
6090	Subscriptions/Publications	3,000.00		3,000.00	
6093	Memberships	12,000.00		12,000.00	
	Total General Administration	**184,495.00**	**800.00**	**185,295.00**	
6100	**Benefits**				

San Bernardino Valley Water Conservation District

		2004 - 2005 Budget			
		General Fund	Groundwater Replenishment	Total	
		Jul 04 - Jun 05	Jul 04 - Jun 05	Jul 04 - Jun 05	%
6110	Vision Insurance	1,055.00	1,055.00	2,110.00	50/50
6120	Workers' Comp Insurance	6,600.00	6,600.00	13,200.00	50/50
6130	Dental Insurance	2,400.00	2,400.00	4,800.00	50/50
6140	State Unemployment Insurance	1,008.00	1,008.00	2,016.00	50/50
6150	Medical Insurance	30,000.00	30,000.00	60,000.00	50/50
6160	Social Security/Medicare Taxes	18,700.00	18,700.00	37,400.00	50/50
6170	PERS Retirement	49,777.00	49,777.00	99,554.00	50/50
6180	Auto Allowance	4,800.00	4,800.00	9,600.00	50/50
	Total Benefits	**114,340.00**	**114,340.00**	**228,680.00**	
6200	**Salaries**				
6210	Overtime		8,400.00	8,400.00	
6220	Contingency/Temporary	0.00		0.00	
6230	Regular Salaries	272,000.00	272,000.00	544,000.00	50/50
	Total Salaries	**272,000.00**	**280,400.00**	**552,400.00**	
6300	**Insurance**				
6310	Property Insurance	520.00	2,080.00	2,600.00	20/80
6320	General Liability Insurance	5,780.00	23,120.00	28,900.00	20/80
	Total Insurance	**6,300.00**	**25,200.00**	**31,500.00**	
	TOTAL EXPENSES	**856,785.00**	**532,140.00**	**1,388,925.00**	

San Bernardino Valley Water Conservation District

		2004 - 2005 Budget			
		General Fund	Groundwater Replenishment	Total	
		Jul 04 - Jun 05	Jul 04 - Jun 05	Jul 04 - Jun 05	%
CAPITAL EXPENDITURES					
7000 Construction					
7010	Materials		5,000.00	5,000.00	
7020	Boundary Fence		5,000.00	5,000.00	
7030	Concrete Structures		15,000.00	15,000.00	
7040	Canals		95,000.00	95,000.00	
7050	Basins		0.00	0.00	
7060	AB 303 Monitoring Wells		121,000.00	121,000.00	
	Total Construction	**0.00**	**241,000.00**	**241,000.00**	
7100 Land & Buildings					
7110	Buildings	0.00		0.00	
7120	Land	0.00		0.00	
7130	Mentone Property (House)	3,000.00		3,000.00	
	Total Land & Buildings	**3,000.00**	**0.00**	**3,000.00**	
7200 Equipment & Vehicles					
7210	Computer Hardware	2,500.00	2,000.00	4,500.00	56/44
7220	Computer Software	7,000.00	4,000.00	11,000.00	64/36
7230	Field Equipment		0.00	0.00	
7240	Office Equipment	0.00		0.00	
7250	Vehicles		6,600.00	6,600.00	
	Total Equipment & Vehicles	**9,500.00**	**12,600.00**	**22,100.00**	
7300 Professional Services					
7315	Environmental Services - Wtr Rts	35,000.00		35,000.00	
7316	Environmental Services - AB 303		0.00	0.00	
7317	Environmental Services - Other		5,000.00	5,000.00	
7335	Engineering Services - Wtr Rts	50,000.00		50,000.00	
7336	Engineering Services - AB 303		79,000.00	79,000.00	
7337	Engineering Services - Other		25,000.00	25,000.00	
	Total Professional Services	**85,000.00**	**109,000.00**	**194,000.00**	
	TOTAL CAPITAL EXPENDITURES	**97,500.00**	**362,600.00**	**460,100.00**	
	TOTAL EXPENSES/CAPITAL EXPENDITURES	**954,285.00**	**894,740.00**	**1,849,025.00**	
	INCOME OVER EXPENSES	**183,415.00**	**-180,765.00**	**2,650.00**	

San Bernardino Valley Water Conservation District
2003 - 2004 Budget

	General Fund	Groundwater Replenishment	Total
	Jul '03 - Jun '04	Jul '03 - Jun '04	Jul '03- Jun '04
OPERATING INCOME			
4010 Interest Income			
4012 **LAIF**	175,000.00		175,000.00
Total Interest Income	**175,000.00**		**175,000.00**
4020 Groundwater Charge			
4021 Assessments		461,300.00	461,300.00
Total Groundwater Charge		**461,300.00**	**461,300.00**
4030 Mining Income			
4031 Cemex USA Plant Site Rent	9,000.00		9,000.00
4032 Cemex USA $0.35/Ton Royalty	645,000.00		645,000.00
4033 Cemex USA Minimum Rent	23,000.00		23,000.00
4034 Redlands Aggregate 5% Royalty	44,000.00		44,000.00
Total Mining Income	**721,000.00**		**721,000.00**
4040 Miscellaneous Income	**500.00**		**500.00**
4050 Property Tax Income	**45,000.00**		**45,000.00**
4060 Property Income			
4062 Mentone Property	6,000.00		6,000.00
4063 Water Conserva. Dist. Plaza	20,000.00		20,000.00
4064 Redlands Well Site Lease	7,100.00		7,100.00
Total Property Income	**33,100.00**		**33,100.00**
4070 Reimbursed Expenses (SWAP)		**40,000.00**	**40,000.00**
4075 Plan B Reimbursements	**30,000.00**		**30,000.00**
4080 Exhange Plan	**38,531.00**		**38,531.00**
TOTAL OPERATING INCOME	**1,043,131.00**	**501,300.00**	**1,544,431.00**

San Bernardino Valley Water Conservation District
2003 - 2004 Budget

	General Fund	Groundwater Replenishment	Total
	Jul '03 - Jun '04	Jul '03 - Jun '04	Jul '03- Jun '04
OPERATING EXPENSE			
5100 Travel			
5110 Mileage	2,000.00		2,000.00
5120 Carrier Travel	10,000.00		10,000.00
Total Travel	**12,000.00**		**12,000.00**
5200 Utilities			
5210 Alarm Service	400.00		400.00
5220 Electricity	9,500.00		9,500.00
5230 Mobile Phone	1,000.00	1,000.00	2,000.00
5240 Telephone	7,800.00	2,600.00	10,400.00
5250 Natural Gas	1,100.00		1,100.00
5260 Water	1,140.00	760.00	1,900.00
Total Utilities	**20,940.00**	**4,360.00**	**25,300.00**
5300 Regional Programs			
5310 SAWPA Programs		2,500.00	2,500.00
Total Regional Programs		**2,500.00**	**2,500.00**
6100 Field Operations			
6110 Field Equipment Maintenance		500.00	500.00
6115 Maint/Repair Rolling Field Equip.		2,000.00	2,000.00
6120 Maintenance Materials		2,200.00	2,200.00
6130 General Facility Maintenance		2,000.00	2,000.00
6140 Scrape, Clean Basins		17,500.00	17,500.00
6150 Levees, Canals, Roads Maint & Repair		10,000.00	10,000.00
6160 Clean Sedimentation Basins		12,000.00	12,000.00
6170 Diversion Maintenance		5,000.00	5,000.00
6180 General Spreading Grounds Maint.		25,000.00	25,000.00
6190 Emergency Repairs		10,000.00	10,000.00
Total Field Operations		**86,200.00**	**86,200.00**
6400 Vehicle Operations			
6410 Vehicle Maintenance	1,750.00	1,750.00	3,500.00
6420 Fuel	2,750.00	2,750.00	5,500.00
Total Vehicle Operations	**4,500.00**	**4,500.00**	**9,000.00**
6500 Professional Services			
6505 Water Quality Testing		5,000.00	5,000.00
6509 Temp Probe Study	0.00		0.00
6510 Misc. Professional Services	2,500.00		2,500.00
6511 Redistricting	0.00		0.00
6520 Aerial Photography & Surveying	10,000.00		10,000.00
6525 Legislative Services	79,000.00		79,000.00
6530 Public Relations Services	31,000.00		31,000.00
6540 Computer Services	3,125.00	3,125.00	6,250.00
6545 Audit & Accounting	6,000.00	6,000.00	12,000.00

San Bernardino Valley Water Conservation District
2003 - 2004 Budget

	General Fund	Groundwater Replenishment	Total
	Jul '03 - Jun '04	Jul '03 - Jun '04	Jul '03- Jun '04
6550 Legal	50,000.00	75,000.00	125,000.00
6560 Land Management Plan	95,300.00		95,300.00
Total Professional Services	**276,925.00**	**89,125.00**	**366,050.00**
6600 General Administration			
6602 Possessory Interest Tax	250.00		250.00
6604 Permits/Application Fees	0.00		0.00
6606 Licenses	100.00		100.00
6610 General Property Maintenance	500.00		500.00
6612 Educational Reimbursement	500.00		500.00
6614 Computer Equip. Maint.(Printers)	750.00		750.00
6616 Office Equip. Maint. (Fax, Copier, etc.)	1,250.00		1,250.00
6618 Janitorial Services	7,200.00		7,200.00
6620 Furniture & Accessories	1,500.00		1,500.00
6622 Directors' Fees	55,000.00		55,000.00
6624 Public Relations Admin.	8,900.00		8,900.00
6626 Bank Service Charges	100.00		100.00
6628 Subscriptions/Publications	5,500.00		5,500.00
6630 Memberships	12,000.00		12,000.00
6634 Meeting Expenses	32,000.00		32,000.00
6636 Elections	10,000.00		10,000.00
6638 Training	1,000.00		1,000.00
6640 Postage Machine Rental	400.00		400.00
6642 Office Supplies	7,650.00		7,650.00
6644 Equipment Rental	0.00		0.00
6646 Printing	4,000.00	1,500.00	5,500.00
6648 Uniforms		1,000.00	1,000.00
6650 Payroll Processing	2,300.00		2,300.00
6652 Postage & Overnight Delivery	2,500.00		2,500.00
6654 Research Contribution	5,000.00		5,000.00
6656 LAFCO Contribution	1,100.00		1,100.00
Total General Administration	**159,500.00**	**2,500.00**	**162,000.00**
6700 Benefits			
6710 Vision Insurance	1,732.00	578.00	2,310.00
6720 Workers' Comp Insurance	6,855.00	2,285.00	9,140.00
6730 Dental Insurance	4,620.00	1,540.00	6,160.00
6740 State Unemployment Insurance	966.00	322.00	1,288.00
6750 Medical Insurance	40,798.00	13,599.00	54,397.00
6760 Social Security/Medicare Taxes	27,754.00	9,432.00	37,186.00
6780 PERS Retirement	52,944.00	17,648.00	70,592.00
6790 Auto Allowance	7,200.00	2,400.00	9,600.00
Total Benefits	**142,869.00**	**47,804.00**	**190,673.00**
6800 Salaries			
6810 Overtime		12,660.00	12,660.00
6820 Contingency/Temporary	80,507.00	0.00	80,507.00
6830 Regular Salaries	370,499.00	123,500.00	493,999.00
Total Salaries	**451,006.00**	**136,160.00**	**587,166.00**

San Bernardino Valley Water Conservation District
2003 - 2004 Budget

	General Fund	Groundwater Replenishment	Total
	Jul '03 - Jun '04	Jul '03 - Jun '04	Jul '03- Jun '04
6900 Insurance			
6920 Property Insurance	2,600.00		2,600.00
6930 General Liability Insurance	26,000.00		26,000.00
Total Insurance	**28,600.00**		**28,600.00**
TOTAL OPERATING EXPENSES	**1,096,340.00**	**373,149.00**	**1,469,489.00**
OPERATING INCOME OVER OPERATING EXPENSE	**-53,209.00**	**128,151.00**	**74,942.00**
CAPITAL EXPENDITURES			
7000 Construction			
7010 Materials		600.00	600.00
7015 New Boundary Fence		0.00	0.00
7020 New Concrete Structures		16,400.00	16,400.00
7030 New Weir Structures (Gates)		17,000.00	17,000.00
7040 New Canals		40,000.00	40,000.00
7050 New Basins		0.00	0.00
7060 USGS Wells		0.00	0.00
7070 Constr. Monitoring Wells		25,000.00	25,000.00
Total Construction		**99,000.00**	**99,000.00**
7100 Land & Buildings			
7110 Buildings		1,500.00	1,500.00
7120 Land		0.00	0.00
7130 Mentone Property		1,000.00	1,000.00
Total Land & Buildings		**2,500.00**	**2,500.00**
7200 Equipment & Vehicles Acquisitions			
7210 Computer Hardwa are	775.00	775.00	1,550.00
7215 Computer Software	6,375.00	6,375.00	12,750.00
7220 Field Tools		650.00	650.00
7230 Field Equipment		350.00	350.00
7240 Office Equipment (Fax, Copier)	5,000.00		5,000.00
7250 Vehicles		6,600.00	6,600.00
Total Equipment & Vehicles	**12,150.00**	**14,750.00**	**26,900.00**
7300 Other Professional Services			
7315 Environmental Services	80,000.00	50,000.00	130,000.00
7335 Engineering Services	0.00	190,000.00	190,000.00
	80,000.00	**240,000.00**	**320,000.00**
TOTAL CAPITAL EXPENDITURES	**92,150.00**	**356,250.00**	**448,400.00**
TOTAL OPERATING/CAPITAL EXPEND.	**1,188,490.00**	**729,399.00**	**1,917,889.00**

SAN BERNARDINO VALLEY WATER CONSERVATION DISTRICT

FINANCIAL STATEMENTS
WITH INDEPENDENT AUDITORS' REPORT

JUNE 30, 2004

SAN BERNARDINO VALLEY WATER CONSERVATION DISTRICT
AUDIT REPORT
JUNE 30, 2004

CONTENTS **PAGE**

MANAGEMENT'S DISCUSSION AND ANALYSIS

INTRODUCTION

Within this section of the San Bernardino Valley Water Conservation District financial report, the District's management provides narrative discussion and analysis of the financial activities of the District for the year ended June 30, 2004. The financial statements for the 2003-2004 fiscal year are the first to be reported under statement number 34 of the *Governmental Accounting Standards Board (GASB)* standards. This narrative is designed to fulfill the requirements of the *Management's Discussion and Analysis (MD&A)* found in paragraphs 8-11.

ORGANIZATION AND DESCRIPTION OF THE DISTRICT

The San Bernardino Valley Water Conservation District was originally formed on January 4, 1932 under the statutory authority of the California Water Code, Sections 74000-76500, as well as other appropriate California laws.

The District is comprised of approximately 50,000 acres of land. Within its boundaries are several municipal water purveyors, public utilities, and other (mutual and private) companies who supply water needs. The primary source of such water is the groundwater basin underlying the District, from which approximately 150 different producers extract 185,000 acre-feet per year through some 300 producing wells.

The function of the District is to conduct water spreading operations by capturing flood flows of the Santa Ana River and Mill Creek. This spreading enables the water to percolate into the groundwater basin for the benefit of all producers.

OVERVIEW OF THE FINANCIAL STATEMENTS

Management's Discussion and Analysis introduces the District's basic financial statements. The basic financial statements include government-wide financial statements, fund financial statements, and notes to the financial statements.

Government-Wide Financial Statements

The statement of net assets and the statement of activities provide information about the San Bernardino Water Conservation District as a whole and include all financial resources. These statements include all assets and liabilities using the accrual basis of accounting. All of the current year's revenues and expenses are taken into account regardless of when cash is received or paid. Depreciation on capital assets is included in expenses.

Both of the government-wide financial statements distinguish between governmental activities for the District that are supported by taxes and other intergovernmental revenues, from businesses-type activities that are intended to recover all or a significant portion of their costs through user fees and charges. Governmental activities include those activities related to the District's primary purpose of water conservation. Business-type activities include the rental activities of District-owned real estate.

Fund Financial Statements

The statements for the District's governmental fund consist of the balance sheet and the statement of revenues, expenditures, and changes in fund balance. These statements encompass essentially the same functions reported as governmental activities in the government-wide financial statements; however, the focus is very different with fund statements. Capital assets, such as buildings, furniture, and equipment, are not included in these financial statements. These financial statements are prepared using the modified accrual method of accounting, which includes only current financial resources. The focus of this accounting method is on cash or items readily converted to cash or obligations that will require the outlay of cash in the current period.

The governmental fund financial statements include reconciliations to the statement of net assets and the statement of activities.

The District's proprietary fund consists of one enterprise fund that encompasses the same functions as the business-type activities in the government-wide financial statements. The proprietary fund statements consist of a statement of net assets, statement of revenues, expenses, and changes in fund net assets, and statement of cash flows.

CONDENSED FINANCIAL INFORMATION

Comparative financial information will be presented in future years as the information is accumulated.

The following is a summary statement of net assets as of June 30, 2004.

	GOVERNMENTAL ACTIVITIES	BUSINESS-TYPE ACTIVITIES	TOTAL
ASSETS			
Cash and investments	$8,354,140	$ 55,438	$8,409,578
Receivables and prepaid expenses	115,419	25,616	141,035
Internal balances	160,656	(160,656)	-
Property and equipment, net	824,899	341,429	1,166,328
TOTAL ASSETS	9,455,114	261,827	9,716,941
LIABILITIES			
Accounts payable and accrued liablilities	162,655	1,909	164,564
Security deposits		7,801	7,801
Deferred revenue	5,000,000		5,000,000
Notes Payable	25,602		25,602
TOTAL LIABILITIES	5,188,257	9,710	5,197,967
NET ASSETS	$4,266,857	$252,117	$4,518,974

The following is a summary of changes in net assets for the year ended June 30, 2004.

	GOVERNMENTAL ACTIVITIES	BUSINESS-TYPE ACTIVITIES	TOTAL
REVENUES			
Program Revenues			
Groundwater assessments	$ 490,625		$ 490,625
Rents and royalties	916,464	$ 104,117	1,020,581
Services for other agencies	44,109		44,109
Other		133	133
Total Program Revenues	1,451,198	104,250	1,555,448
General Revenues			
Property taxes	54,193		54,193
Investment earnings	94,134		94,134
Other	6,739		6,739
Total General Revenues	155,066	-	155,066
Total Revenues	1,606,264	104,250	1,710,514
EXPENSES	2,342,982	54,029	2,397,011
CHANGE IN NET ASSETS	(736,718)	50,221	(686,497)
NET ASSETS, BEGINNING	5,003,575	201,896	5,205,471
NET ASSETS, ENDING	$ 4,266,857	$ 252,117	$4,518,974

BUDGETS

The District typically undergoes a mid-year budget revision in which the budget is adjusted to reflect actual revenue trends for the year and changing priorities for use of District resources. In the fiscal year ended June 30, 2004, expected revenue as a whole was amended upward to reflect higher than expected revenue during the first half of the year. The most significant increases to the District's budgeted revenue occurred in Groundwater Assessments, Mining Income, and Source Water Assessment Program ("SWAP"). While the first two revenue categories saw actual revenue greater even than the revised budget, the SWAP revenue was much lower than even the original estimates due to decreased activity in that program. The most significant decrease to the District's budgeted revenue occurred in Investment Income, due to lower than expected rates of return. Actual revenue from Investment Income was lower even than the revised budget numbers for that category. Exchange Plan - Project Manager reimbursements were down in this fiscal year due to a greater willingness on the part of the District to absorb these costs internally.

The budget for Construction expenditures was revised upward in anticipation of new infrastructure being built. Actual expenditures in that category were minimal, as construction activity was postponed due to a more conservative financial approach adopted by the District partway through the year. The Groundwater Replenishment budget was sharply increased in anticipation of purchasing additional State Water Project deliveries to be reimbursed as agencies call on delivery of that water. The Groundwater Level Mitigation Program budget was also increased for the purchase of State Water Project deliveries on a cost-sharing basis with other agencies in the basin. Field Operations were revised downward, and less was spent than the revised budget, due to a cost-saving cutback in these activities. Environmental Services - Water Rights Application expenses were higher than budgeted due to unexpected changes to the scope of the contract these monies were funding. The budget for Engineering Services - Other was increased in anticipation of engineering services supporting new construction activity. Actual expenses were curtailed in this category when construction activity was postponed.

FINANCIAL POSITION

The fiscal year ended June 30, 2004 saw a decrease in net assets of $686,497. This negative change resulted from a number of one-time or short-term payments toward projects designed either to further, or to secure the future of, this District's mission.

The largest payment funded a one-time $414,400 purchase of State Water Project water in an effort to address significantly lowered groundwater levels in the basin. The District has begun receiving reimbursement for this cost, and expects to be fully reimbursed as the water is used over time. An additional one-time State Water Project purchase was made in the amount of $151,648, for which the District will not be reimbursed. Monies in the amount of $361,585 were paid for environmental and engineering work in support of the District's water rights; an effort aimed at guaranteeing the District's continued legal right to divert water for spreading. An additional $95,300 was paid as the District's proportionate share of the planning costs for the Upper Santa Ana River Land Management and Habitat Conservation Plan ("Wash Plan"); a regional program which will help secure the District's continued mining revenue and ability to spread water.

As indicated, these are all one-time or short-term expenses incurred by the District. The budget for the fiscal year ending June 30, 2005 recognizes the need to bring expenses in line with revenue, and is proposed to be approximately balanced despite remaining costs associated with the water rights and the Wash Plan. Revenue should exceed expenses for both Governmental Activities and Business-type Activities in the next and succeeding years. As such, further significant reduction in net assets is not anticipated at this time.

The District has significant cash and investments - in the amount of $8,354,140 - available for use should unexpected expenses arise. Of this amount, $5,000,000 may be required, under certain circumstances, for repayment of pre-paid mining royalties. The District does not expect such conditions to arise and, through its participation in the Wash Plan, is helping to ensure this is the case.

FORECASTING

There are no currently known facts, decisions, or conditions that are expected to have a significant effect on financial position or results of operations.

DEBORAH L. CROWLEY, C.P.A.
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Certified Public Accountants
and
Business Advisors

INDEPENDENT AUDITORS' REPORT

Board of Directors
San Bernardino Valley Water Conservation District
Redlands, California

We have audited the accompanying financial statements of the governmental activities, the business-type activities, and each major fund of the San Bernardino Valley Water Conservation District as of and for the year ended June 30, 2004 which collectively comprise the District's basic financial statements as listed in the table of contents. These financial statements are the responsibility of the District's management. Our responsibility is to express opinions on these financial statements based on our audit.

We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinions.

The District has not determined the fair market value at the time of donation of land that was donated to the District. Generally accepted accounting principles require that the cost of all purchased land and the fair market value of donated land be included in the financial statements. Because the fair market value at the time of donation of donated land has not been determined, the total amount that should be reported in the financial statements is not known.

In our opinion, except for the effect on the financial statements of the matter described in the preceding paragraph, the financial statements referred to above present fairly, in all material respects, the respective financial position of the governmental activities, the business-type activities, and each major fund of San Bernardino Valley Water Conservation District as of June 30, 2004, and the respective changes in financial position and cash flows, where applicable, thereof for the year then ended in conformity with accounting principles generally accepted in the United States of America.

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As described in Note 1B, the District has implemented a new financial reporting model, as required by the provisions of GASB Statement No. 34, *Basic Financial Statements - and Management's Discussion and Analysis - for State and Local Governments*, as amended and interpreted, as of July 1, 2003.

The management's discussion and analysis and budgetary comparison information on pages i through iv and page 23 are not a required part of the basic financial statements but are supplementary information required by accounting principles generally accepted in the United States of America. We have applied certain limited procedures, which consisted principally of inquiries of management regarding the methods of measurement and presentation of the required supplementary information. However, we did not audit the information and express no opinion on it.

Eadie and Payne, LLP

November 18, 2004

SAN BERNARDINO VALLEY WATER CONSERVATION DISTRICT
STATEMENT OF NET ASSETS
JUNE 30, 2004

	GOVERNMENTAL ACTIVITIES	BUSINESS-TYPE ACTIVITIES	TOTAL
ASSETS			
Cash and investments	$8,354,140	$ 55,438	$8,409,578
Mining income receivable	85,779		85,779
Interest receivable	29,640		29,640
Prepaid commissions		25,616	25,616
Internal balances	160,656	(160,656)	-
Property and equipment, net	824,899	341,429	1,166,328
TOTAL ASSETS	9,455,114	261,827	9,716,941
LIABILITIES			
Accounts payable	87,115	1,909	89,024
Accrued payroll and payroll taxes	17,489		17,489
Accrued compensated absences - noncurrent	58,051		58,051
Security deposits		7,801	7,801
Deferred revenue	5,000,000		5,000,000
Notes Payable			
Portion due within one year	6,537		6,537
Portion due after one year	19,065		19,065
TOTAL LIABILITIES	5,188,257	9,710	5,197,967
NET ASSETS			
Invested in capital assets, net of related debt	799,297	341,429	1,140,726
Unrestricted	3,467,560	(89,312)	3,378,248
TOTAL NET ASSETS	$4,266,857	$252,117	$4,518,974

The accompanying notes are an integral part of the financial statements.

SAN BERNARDINO VALLEY WATER CONSERVATION DISTRICT
STATEMENT OF ACTIVITIES
FOR THE YEAR ENDED JUNE 30, 2004

	TOTAL	GOVERNMENTAL ACTIVITIES	BUSINESS-TYPE ACTIVITIES
EXPENSES			
Water Conservation			
Transportation and travel	$ 16,047	$ 16,047	
Utilities	35,839	26,764	$ 9,075
Facility maintenance	27,397	8,716	18,681
Groundwater replenishment	414,400	414,400	
Groundwater level mitigation program	151,648	151,648	
Field operations	19,821	19,821	
Building maintenance	1,510	1,510	
Equipment expenses	2,594	2,594	
Vehicle operations	12,642	12,642	
Legislative services	81,100	81,100	
Legal	119,698	119,698	
Land management plan	95,300	95,300	
Environmental services - water rights application	161,254	161,254	
Environmental services - other	20,100	20,100	
Engineering services - water rights application	156,807	156,807	
Engineering services - other	13,736	13,736	
Other professional services	32,793	32,793	
Management services	14,314	-	14,314
General administration	190,559	186,338	4,221
Employee benefits	187,548	187,548	
Salaries	551,397	551,397	
Insurance	31,176	31,176	
Depreciation	59,331	51,593	7,738
Total Program Expenses	2,397,011	2,342,982	54,029
PROGRAM REVENUES			
Groundwater assessments	490,625	490,625	
Rents and royalties	1,020,581	916,464	104,117
Services for other agencies	44,109	44,109	
Other	133		133
Total Program Revenues	1,555,448	1,451,198	104,250
NET PROGRAM EXPENSE (REVENUE)	841,563	891,784	(50,221)

STATEMENT OF ACTIVITIES (Continued)

	TOTAL	GOVERNMENTAL ACTIVITIES	BUSINESS-TYPE ACTIVITIES
GENERAL REVENUES			
Property taxes	$ 54,193	$ 54,193	
Property income	6,047	6,047	
Investment earnings	94,134	94,134	
Miscellaneous	692	692	
Total General Revenues	155,066	155,066	-
CHANGE IN NET ASSETS	(686,497)	(736,718)	$ 50,221
NET ASSETS, BEGINNING	5,205,471	5,003,575	201,896
NET ASSETS, ENDING	$4,518,974	$4,266,857	$252,117

The accompanying notes are an integral part of the financial statements.

SAN BERNARDINO VALLEY WATER CONSERVATION DISTRICT
BALANCE SHEET
GOVERNMENTAL FUND
JUNE 30, 2004

ASSETS	
Cash and investments	$8,354,140
Mining income receivable	85,779
Interest receivable	29,640
Advances to Redlands Plaza	160,656
TOTAL ASSETS	$8,630,215
LIABILITIES	
Accounts payable	$ 87,115
Accrued payroll and payroll taxes	17,489
Deferred revenue	5,000,000
TOTAL LIABILITIES	5,104,604
FUND BALANCE	
Unreserved	3,525,611
Total Fund Balances	3,525,611
TOTAL LIABILITIES AND FUND BALANCES	$8,630,215

The accompanying notes are an integral part of the financial statements.

SAN BERNARDINO VALLEY WATER CONSERVATION DISTRICT
STATEMENT OF REVENUES, EXPENDITURES, AND CHANGES IN FUND BALANCE - GOVERNMENTAL FUND
FOR THE YEAR ENDED JUNE 30, 2004

REVENUES	
Groundwater assessments	$ 603,632
Investment income	94,134
Property taxes	54,193
Property income	6,047
Mining income	916,464
Exchange plan - project manager	7,259
Source water assessment program	36,850
Other	692
Total Revenues	1,719,271
EXPENDITURES	
Transportation and travel	16,047
Utilities	26,764
Construction	8,716
Groundwater replenishment	414,400
Groundwater level mitigation program	151,648
Field operations	19,821
Land and buildings	1,510
Equipment and vehicle acquisitions	16,417
Vehicle operations	12,642
Legislative services	81,100
Legal	119,698
Land management plan	95,300
Environmental services - water rights application	161,254
Environmental services - other	20,100
Engineering services - water rights application	156,807
Engineering services - other	13,736
Other professional services	32,793
General administration	186,338
Benefits	187,548
Salaries	605,878
Insurance	31,176
Total Expenditures	2,359,693
NET CHANGE IN FUND BALANCE	(640,422)
FUND BALANCE, BEGINNING	4,166,033
FUND BALANCE, ENDING	$3,525,611

The accompanying notes are an integral part of the financial statements.

SAN BERNARDINO VALLEY WATER CONSERVATION DISTRICT

RECONCILIATION OF THE GOVERNMENTAL FUND BALANCE TO THE NET ASSETS OF GOVERNMENTAL ACTIVITIES

JUNE 30, 2004

Total fund balance - governmental fund	$3,525,611
Amounts reported for governmental activities in the statement of net assets are different because:	
Capital assets of $1,218,194, net of accumulated depreciation of $393,295, are not financial resources and, therefore, are not reported in the funds.	824,899
Long-term liabilities are not due and payable in the current period and, therefore, are not reported in the funds.	
Note payable	(25,602)
Compensated absences	(58,051)
NET ASSETS OF GOVERNMENTAL ACTIVITIES	$4,266,857

The accompanying notes are an integral part of the financial statements.

SAN BERNARDINO VALLEY WATER CONSERVATION DISTRICT

RECONCILIATION OF THE STATEMENT OF REVENUES, EXPENDITURES, AND CHANGES IN FUND BALANCE OF GOVERNMENTAL FUND TO THE STATEMENT OF ACTIVITIES

FOR THE YEAR ENDED JUNE 30, 2004

Net change in fund balance - governmental fund	$(640,422)
Amounts reported for governmental activities in the statement of activities are different because:	
Assessment revenues from prior periods collected during the current period provide current financial resources for the governmental funds but are not reported in the statement of activities.	(113,007)
The increase in the liability for compensated absences does not require the use of current financial resources and, therefore, is not reported as expenditures in governmental funds.	(17,186)
Severance pay applicable to employment in prior periods requires the use of current financial resources in the governmental fund but is not reported in the statement of activities.	71,667
Governmental funds report capital outlay as expenditures. However, in the statement of activities, the cost of those assets is allocated over their estimated useful lives and reported as depreciation expense.	
Depreciation expense	(51,593)
Capital outlay	7,286
Payments on notes payable are reductions of liabilities and are not reported in the statement of activities but are reported as expenditures in the governmental fund.	6,537
CHANGE IN NET ASSETS OF GOVERNMENTAL ACTIVITIES	$(736,718)

The accompanying notes are an integral part of the financial statements.

SAN BERNARDINO VALLEY WATER CONSERVATION DISTRICT
STATEMENT OF NET ASSETS
PROPRIETARY FUND
JUNE 30, 2004

	REDLANDS PLAZA
ASSETS	
Current Assets	
Cash and investments	$ 55,438
Total Current Assets	55,438
Noncurrent Assets	
Prepaid commissions	25,616
Capital assets, net	341,429
Total Noncurrent Assets	367,045
TOTAL ASSETS	422,483
LIABILITIES	
Current Liabilities	
Accounts payable	1,909
Total Current Liabilities	1,909
Noncurrent Liabilities	
Due to other funds	160,656
Security deposits	7,801
Total Noncurrent Liabilities	168,457
TOTAL LIABILITIES	170,366
NET ASSETS	
Invested in capital assets, net of related debt	180,773
Unrestricted	71,344
TOTAL NET ASSETS	$252,117

The accompanying notes are an integral part of the financial statements.

SAN BERNARDINO VALLEY WATER CONSERVATION DISTRICT

STATEMENT OF REVENUES, EXPENSES, AND CHANGES IN FUND NET ASSETS

PROPRIETARY FUND

FOR THE YEAR ENDED JUNE 30, 2004

	REDLANDS PLAZA
REVENUES	
Rental income	$104,117
Other income	133
	104,250
EXPENSES	
Maintenance and repairs	18,681
Lease commissions	4,714
Management fee	9,600
Taxes	2,830
Utilities	9,075
Telephone	828
Depreciation	7,738
Other	563
	54,029
OPERATING INCOME	50,221
NET ASSETS, BEGINNING	201,896
NET ASSETS, ENDING	$252,117

The accompanying notes are an integral part of the financial statements.

SAN BERNARDINO VALLEY WATER CONSERVATION DISTRICT
STATEMENT OF CASH FLOWS
PROPRIETARY FUND
FOR THE YEAR ENDED JUNE 30, 2003

CASH FLOWS FROM OPERATING ACTIVITIES	
Receipts from tenants	$107,285
Payments to suppliers	(48,081)
Other operating receipts	133
Net Cash Provided By Operating Activities	59,337
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES	
Tenant improvements	(11,027)
Net Cash Provided By (Used In) Capital and Related Financing Activities	(11,027)
CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES	
Repayment of advance from General Fund	(20,000)
Net Cash Provided By (Used In) Noncapital Financing Activities	(20,000)
NET INCREASE IN CASH	28,310
BALANCE, BEGINNING OF YEAR	27,128
BALANCE, END OF YEAR	$ 55,438
RECONCILIATION OF OPERATING INCOME TO NET CASH PROVIDED BY OPERATING ACTIVITIES	
Operating income	$ 50,221
Adjustments to Reconcile Operating Income to Net Cash Provided By Operating Activities	
Depreciation	7,738
Amortization of prepaid commissions	4,714
Change in Operating Assets and Liabilites	
Decrease in accounts receivable	443
Increase in prepaid commission	(4,143)
Decrease in accounts payable	(2,361)
Increase in security deposits	2,725
Net Cash Provided By Operating Activities	$ 59,337

The accompanying notes are an integral part of the financial statements.

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

A. General

The San Bernardino Valley Water Conservation District (District) was formed in 1932 under the statutory authority of the California Water Code. Its function is to conduct water spreading operations by capturing flood flows of the Santa Ana River and Mill Creek.

B. New Financial Reporting Model

Effective July 1, 2003, the District implemented Governmental Accounting Standards Board (GASB) Statement No. 34, *Basic Financial Statements - and Management's Discussion and Analysis - for State and Local Governments*. GASB Statement No. 34 established a new financial reporting model for state and local governments that includes the addition of management's discussion and analysis, government-wide financial statements, and required supplementary information, and eliminates the use of account groups in the fund financial statements.

The GASB determined that fund accounting will continue to be essential in helping governments to achieve fiscal accountability and should, therefore, be retained. The GASB also determined that government-wide financial statements are needed to allow users of financial reports to assess a government's operational accountability. The new GASB model integrates fund-based financial reporting and government-wide financial reporting as complementary components of a single comprehensive financial reporting model.

The District is engaged in a single governmental activity and also has a proprietary fund.

C. Government-Wide and Fund Financial Statements

The statement of net assets and the statement of activities are the government-wide financial statements and report information on all of the activities of the District.

The balance sheet and statement of revenues, expenditures, and changes in fund balance report information on the general operating fund of the District.

Information on the proprietary fund is reported on a separate statement of net assets, a statement of revenues, expenses, and changes in fund net assets, and a statement of cash flows.

D. **Measurement Focus, Basis of Accounting, and Financial Statement Presentation**

The government-wide financial statements are reported using the economic resources measurement focus and the accrual basis of accounting. Revenues are recorded when earned and expenses are recorded when a liability is incurred, regardless of the timing of related cash receipts and disbursements.

Governmental fund financial statements are reported using the current financial resources measurement focus and the modified accrual basis of accounting. Revenues are recognized when they are both measurable and available. Revenues are considered to be available when they are collectible within the current period or soon enough thereafter to pay liabilities of the current period. For this purpose, the District considers revenues to be available if they are collected within sixty days after year-end. Expenditures are recorded when a liability is incurred, as under accrual accounting.

Assessment revenues and interest income are susceptible to accrual and are recognized as revenue in the period assessed or earned.

The proprietary fund is accounted for on a flow of economic resources measurement focus and the accrual basis of accounting.

The District applies all GASB pronouncements as well as the Financial Accounting Standards Board pronouncements issued on or before November 30, 1989, unless those pronouncements conflict with or contradict GASB pronouncements.

E. **Budgets**

The District adopts an annual budget for the general fund. Comparisons between actual and budgeted amounts are made by management and are used as a management tool during the year.

F. **Capital Assets**

Capital assets are reported in the government-wide statement of net assets and in the proprietary fund statement of net assets, but are not reported in the general fund financial statements.

With the exception of infrastructure, capital assets are capitalized at cost and updated for additions and retirements during the year. Improvements that add to the value of the asset or materially extend the asset's life are capitalized. The costs of normal maintenance and repairs are expensed.

The cost of capital assets is depreciated over the estimated useful lives of the related assets using the straight-line method. The useful lives of capital assets for purposes of computing depreciation are as follows:

General Fund	
Buildings	40-50 years
Automotive equipment	5 years
Office furniture and equipment	5-10 years
Tools and other equipment	5-10 years
Proprietary Fund	
Buildings	40 years
Tenant Improvements	
Structural	40 years
Furnishings	10 years

The District has elected to not retroactively report major general infrastructure assets. The District will be required to capitalize and depreciate future additions of infrastructure assets.

G. **Cash and Investments**

The District considers all short-term debt securities with a maturity of three months or less when acquired to be cash equivalents.

H. **Property Taxes**

The District assesses its property taxes through the County tax rolls. Property taxes are recognized as revenue when they are both measurable and available.

I. **Estimates**

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results may differ from those estimates.

2. CASH AND INVESTMENTS

Cash and investments at June 30, 2004 consisted of the following:

	AMOUNT
Demand deposits	$ 151,760
Petty cash	200
Pooled investments	8,257,618
TOTAL CASH AND INVESTMENTS	$ 8,409,578

A. Custodial Credit Risk - Deposits

Custodial credit risk is the risk that in the event of a bank failure, the government's deposits may not be returned to it. The District does not have a deposit policy for custodial credit risk. As of June 30, 2004, the District's bank balance was exposed to custodial credit risk as follows:

	AMOUNT
Insured	$ 100,000
Collateralized with securities held by the pledging bank	127,771
TOTAL BANK BALANCES	$ 227,771

B. Investments

The pooled investments are with the State of California State Treasurer's Local Agency Investment Fund. The State Treasurer's Local Agency Investment Fund (LAIF) is a governmental investment pool managed and directed by the California State Treasurer and is not registered with the Securities and Exchange Commission. An oversight committee, comprised of California State officials and various participants, provides oversight to the management of the fund. The daily operations and responsibilities of LAIF fall under the auspices of the State Treasurer's office. The District is a voluntary participant in the investment pool.

The District holds investments in LAIF that are subject to being adjusted to fair value. The District relied upon information provided by the State Treasurer in estimating the District's fair value position of its holdings in LAIF. The District had a contractual withdrawal value of $8,270,982 whose prorata share of fair value was estimated by the State Treasurer to be $8,257,618. LAIF is not subject to a credit quality rating.

3. CAPITAL ASSETS

WATER CONSERVATION ASSETS

	BALANCE, JULY 1, 2003	ADDITIONS	RETIREMENTS	BALANCE, JUNE 30, 2004
Cost				
Land	$ 32,537			$ 32,537
Buildings and paving	313,625			313,625
Vehicles	94,137			94,137
Field equipment	77,583			77,583
Administrative Assets				
Land - office site	64,750			64,750
Office building	471,244			471,244
Office equipment	157,032	$ 7,286		164,318
	1,210,908	$ 7,286	$ -	1,218,194
Accumulated Depreciation				
Buildings and paving	69,987	$ 6,489		76,476
Vehicles	50,871	12,003		62,874
Field equipment	56,182	7,237		63,419
Administrative Assets				
Office building	58,906	11,781		70,687
Office equipment	105,756	14,083		119,839
	341,702	$ 51,593	$ -	393,295
NET	$ 869,206			$ 824,899

PROPRIETARY FUND ASSETS - REDLANDS PLAZA

	BALANCE, JULY 1, 2003	ADDITIONS	RETIREMENTS	BALANCE, JUNE 30, 2004
Cost				
Land	$ 110,250			$ 110,250
Building	186,170			186,170
Tenant improvements	77,827	$ 11,027		88,854
	374,247	$ 11,027	$ -	385,274
Accumulated Depreciation				
Building	29,089	$ 4,654		33,743
Tenant improvements	7,018	3,084		10,102
	36,107	$ 7,738	$ -	43,845
NET	$ 338,140			$ 341,429

4. **COMPENSATED ABSENCES**

It is the District's policy to record the cost of vested vacation and sick leave as it is earned. Vacation pay is payable to employees at the time a vacation is taken or upon termination of employment. Employees may receive payment for unused sick leave upon termination according to a predetermined vesting schedule.

At June 30, 2004, the total accrued liability for compensated absences amounted to $58,051, which consisted of $36,744 and $21,307 of vested vacation and sick leave, respectively.

5. **NOTE PAYABLE**

The note payable is secured by a Chevrolet Suburban. The note is payable in monthly installments of $545 principal with a zero percent interest rate. Future principal payments on this note are as follows:

YEARS ENDING JUNE 30,	AMOUNT
2005	$ 6,537
2006	6,537
2007	6,537
2008	5,991
TOTAL	$ 25,602

6. **DEFERRED REVENUE**

During fiscal year 1993, the District received a $5,000,000 prepayment against future rentals and royalties to be received for the extraction of rock, sand, and gravel from its Section 7 property. The lease terms call for a commencement date of approximately December 31, 2002, upon lapse of existing easements. The initial term is ten years with four successive five-year renewal periods, minimum annual rents of $1,000,000, and a minimum aggregate excavation of 12,000,000 tons of materials. In the event the lessee is unable to obtain the necessary permits within four years after the commencement date, the amounts prepaid by the lessee would then become refundable, without interest.

7. **LEASE AGREEMENTS**

The District is the lessor in various lease agreements providing for the excavation and removal of rock, gravel, sand, and other materials from District property. Monthly lease payments are generally based on tonnage of materials removed, subject to annual minimum amounts.

The Redlands Plaza Enterprise Fund is the lessor of commercial building space under operating leases expiring in various years through the year ending June 30, 2013.

The property held for lease consists of the following:

	AMOUNT
Land, building, and tenant improvements	$ 385,274
Less: Accumulated depreciation	43,845
TOTAL	$ 341,429

Minimum future rentals to be received on noncancelable leases as of June 30, 2004 for each of the next 5 years were as follows:

YEARS ENDING JUNE 30,	SAND AND GRAVEL MINING	REDLANDS PLAZA	TOTAL
2005	$ 34,606	$ 88,356	$ 122,962
2006	32,433	91,288	123,721
2007		83,962	83,962
2008		60,219	60,219
2009		46,825	46,825
Thereafter		143,457	143,457
TOTAL MINIMUM FUTURE RENTALS	$ 67,039	$ 514,107	$ 581,146

8. **PENSION PLAN**

A. **Plan Description**

The San Bernardino Valley Water Conservation District contributes to the California Public Employees' Retirement System (CalPERS), an agent multiple-employer public employee defined-benefit pension plan. CalPERS provides retirement and disability benefits, annual cost-of-living adjustments, and death benefits to Plan members and beneficiaries. CalPERS acts as a common investment and administrative agent for participating public entities within the State of California. Benefit provisions and all other requirements are established by State statutes within the Public Employee's Retirement Law. The San Bernardino Valley Water Conservation District selects optional benefit provisions and adopts those benefits through local ordinance. Copies of the CalPERS' annual financial report may be obtained from the CalPERS Executive Office, 400 "P" Street, Sacramento, CA 95814.

B. **Funding Policy**

Active members in the Plan are required to contribute 7% of their annual covered salary. As an employee fringe benefit, the employee contribution is paid by the District. The District is required to contribute the actuarially determined remaining amounts necessary to fund the benefits for its members. The actuarial methods and assumptions used are those adopted by the CalPERS Board of Administration. The contribution requirements of the Plan members are established by the California state statute and the employer contribution rate is established and may be amended by CalPERS.

C. **Annual Pension Cost**

For the year ended June 30, 2004, the District's annual pension cost was, and the District actually contributed, $76,784. The required contribution was determined as part of the June 30, 2001 actuarial valuation using the entry-age actuarial cost method. The actuarial assumptions included (a) 8.25% investment rate of return (net of administrative expenses); (b) projected salary increases that vary by duration of service ranging from 3.75% to 14.20%; and (c) a cost-of-living adjustment. Both (a) and (b) include an inflation component of 3.5%. The actuarial value of the Plan's assets was determined using a technique that smoothes the effect of short-term volatility in the market value of investments over a three-year period. The Plan's unfunded actuarial accrued liability is being amortized as a level percentage of projected payroll over a closed period.

Four-Year Trend Information:

YEARS ENDED JUNE 30,	ANNUAL PENSION COST (APC)	PERCENTAGE OF APC CONTRIBUTED	NET PENSION OBLIGATION
2001	$ 64,379	100.0 %	-
2002	65,006	100.0	-
2003	70,307	100.0	-
2004	76,784	100.0	-

Funded Status of Plan:

	ACTUARIAL ACCRUED LIABILITY	ACTUARIAL VALUE OF ASSETS	(OVER-FUNDED) LIABILITY	FUNDED RATIO	ANNUAL COVERED PAYROLL	(OVER-FUNDED) ACTUARIAL LIABILITY AS A % OF PAYROLL
June 30, 1998	$ 486,216	$ 589,719	$ (103,503)	121.3 %	$ 377,026	(27.5) %
June 30, 1999	588,149	711,100	(122,951)	120.9	429,900	(28.6)
June 30, 2000	677,718	859,182	(181,464)	126.8	465,706	(39.0)
June 30, 2001	770,717	936,520	(165,803)	121.5	496,138	(33.4)

9. **RISK MANAGEMENT**

The District is exposed to various risks of loss related to limited torts; theft of, damage to and destruction of assets; errors and omissions; and natural disasters for which the District carries commercial insurance. There have been no significant reductions in coverage from the prior year and settlements have not exceeded coverage in the past three years.

10. **INTERFUND BALANCES**

The advance of $160,656 from the governmental fund to the proprietary fund was created during the original construction of the rental facilities. The balance, which was originally in excess of $320,000, is being repaid from the operating income of the proprietary fund. The balance has been reduced by $20,000 in each of the last two years.

11. **GRANT**

The District has been awarded a grant from the State Department of Water Resources to construct two monitoring wells. The grant for $230,000 is not expected to cover the complete cost of the project. As of June 30, 2004, exploratory costs of $13,736 had been incurred on the project.

12. **COMMITMENT**

The District has awarded a contract for drilling and outfitting wells in the Santa Ana River and Mill Creek. The contract amount is not to exceed $238,406.

13. **NEW PRONOUNCEMENTS**

In addition to the implementation of GASB Statement No. 34, as discussed in Note 1B, the District also implemented GASB Statements No. 37, 38, and 40. These pronouncements affect some of the required disclosures but do not have a significant impact on the financial statements.

SAN BERNARDINO VALLEY WATER CONSERVATION DISTRICT
ORGANIZATIONAL INFORMATION
JUNE 30, 2004

Organization and Description of the District:
The San Bernardino Valley Water Conservation District was originally formed on January 4, 1932 under the statutory authority of the California Water Code, Sections 74000-76500, as well as other appropriate California laws.

The District is comprised of approximately 50,000 acres of land. Within its boundaries are several municipal water purveyors, public utilities, and other (mutual and private) companies who supply water needs. The source of such water is the groundwater basin underlying the District, of which an average of 150,000 acre-feet per year is extracted through some 300 producing wells by approximately 150 different producers.

The function of the District is to conduct water spreading operations by capturing flood flows of the Santa Ana River and Mill Creek. This spreading enables the water to percolate into the groundwater basin for the benefit of all producers.

Officers and Directors:

Cheryl A. Tubbs	President
Clare Henry Day	Vice President
Manuel Aranda, Jr.	Director
Melody A. Henriques	Director
Bert Marcum, Jr.	Director
Arnold L. Wright	Director

General Manager: Lawrence M. Libeu

SAN BERNARDINO VALLEY WATER CONSERVATION DISTRICT
BUDGETARY COMPARISON SCHEDULE
FOR THE YEAR ENDED JUNE 30, 2004

	BUDGETED AMOUNTS			VARIANCE - FAVORABLE
	ORIGINAL	FINAL	ACTUAL	(UNFAVORABLE)
REVENUES				
Groundwater assessments	$ 461,300	$ 530,875	$ 603,632	$ 72,757
Investment income	175,000	150,000	94,134	(55,866)
Property taxes	45,000	52,000	54,193	2,193
Property income	33,100	33,000	26,047	(6,953)
Mining income	721,000	774,600	916,464	141,864
Exchange plan - project manager	40,000	35,250	7,259	(27,991)
Source water assessment program	68,531	165,000	36,850	(128,150)
Other	500	675	692	17
Total Revenues	1,544,431	1,741,400	1,739,271	(2,129)
EXPENDITURES				
Transportation and travel	12,000	15,000	16,047	(1,047)
Utilities	25,300	28,300	26,764	1,536
Construction	99,000	141,700	8,716	132,984
Groundwater replenishment	2,500	420,000	414,400	5,600
Groundwater level mitigation program		150,000	151,648	(1,648)
Field operations	86,200	37,200	19,821	17,379
Land and buildings	2,500		1,510	(1,510)
Equipment and vehicle acquistions	26,900	16,600	16,417	183
Vehicle operations	9,000	11,500	12,642	(1,142)
Legislative services	79,000	79,000	81,100	(2,100)
Legal	125,000	135,000	119,698	15,302
Land management plan	95,300	95,300	95,300	
Environmental services - water rights application	130,000	146,000	161,254	(15,254)
Environmental services - other		33,900	20,100	13,800
Engineering services - water rights application	190,000	156,330	156,807	(477)
Engineering services - other		134,200	13,736	120,464
Other professional services	66,750	38,000	32,793	5,207
General administration	162,000	175,175	186,338	(11,163)
Benefits	190,673	191,166	187,548	3,618
Salaries	587,166	586,600	605,878	(19,278)
Insurance	28,600	31,500	31,176	324
Total Expenditures	1,917,889	2,622,471	2,359,693	262,778

BUDGETARY COMPARISON SCHEDULE (Continued)

	BUDGETED AMOUNTS ORIGINAL	BUDGETED AMOUNTS FINAL	ACTUAL	VARIANCE - FAVORABLE (UNFAVORABLE)
EXCESS OF REVENUES OVER (UNDER) EXPENDITURES	$(373,458)	$(881,071)	$ (620,422)	$260,649
RECONCILIATION TO NET CHANGE IN FUND BALANCE				
Repayments from the proprietary fund (in property income) are inflows of budgetary resources but are not revenues for financial reporting purposes.			(20,000)	
NET CHANGE IN FUND BALANCE			(640,422)	
FUND BALANCE, BEGINNING			4,166,033	
FUND BALANCE, ENDING			$3,525,611	

Response from Tom Dodson, Tom Dodson and Associates, LAFCO Environmental Consultant, Identifying Determination for Maintaining Existing Sphere of Influence Boundaries

Attachment 6

TOM DODSON & ASSOCIATES
2150 N. ARROWHEAD AVENUE
SAN BERNARDINO, CA 92405
TEL (909) 882-3612 • FAX (909) 882-7015
E-MAIL tda@tstonramp.com

January 20, 2005

Ms. Kathleen Rollings-McDonald
Local Agency Formation Commission
175 West Fifth Street, Second Floor
San Bernardino, CA 92415-0490

Dear Kathy:

LAFCO 2919 consists of a service review for San Bernardino Valley Water Conservation District (District) pursuant to Government Code Section 56430 and Sphere of Influence Study pursuant to Government Code 56425. If approved by the Commission, the service and Sphere review would retain the District existing boundaries, which are currently limited to the eastern portion of San Bernardino County. Based on the above proposal, it appears that LAFCO 2919 can be implemented without causing any physical changes to the environment or any adverse environmental impacts.

The service and Sphere review does not appear to have any potential to alter the existing physical environment in any manner. Verification of the current District sphere as proposed does not have any potential for causing physical changes in the environment. Therefore, I recommend that the Commission find that a Statutory Exemption (as defined in the California Environmental Quality Act, CEQA) applies to LAFCO 2919 under Section 15061 (b) (3) of the State CEQA Guidelines, which states: "A project is exempt from CEQA if the activity is covered by the general rule that CEQA applies only to projects which have the potential for causing significant effect on the environment. Where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA." It is my opinion, and recommendation to the Commission, that this circumstance applies to LAFCO 2919.

Based on this review of LAFCO 2919 and the pertinent sections of CEQA and the State CEQA Guidelines, I conclude that LAFCO 2919 does not constitute a project under CEQA and adoption of the Statutory Exemption and filing of a Notice of Exemption is the most appropriate determination to comply with CEQA for this action. The Commission can approve the review and findings for this action and I recommend that you notice LAFCO 2919 as statutorily exempt from CEQA for the reasons outlined in the State CEQA Guideline sections cited above. The Commission needs to file a Notice of Exemption with the County Clerk to the Board for this action once the hearing is completed.

A copy of this exemption should be retained in LAFCO's project file to serve as verification of this evaluation and as the CEQA environmental determination record. If you have any questions, please feel free to give me a call.

Sincerely,

Tom Dodson